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 FENDER, D. R. JARDINE, &c. 55
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VITAL SHOTS ON THE ELEPHANT

Plate 1

THE DANGER SIGNAL, EARS PRICKED, TRUNK ALERT.

THE TWO FRONTAL SHOTS HAVE BEEN ROUGHLY SHOWN BY RINGS DRAWN ON THE PHOTOGRAPH.

THE LONSDALE LIBRARY

VOLUME XIV

BIG GAME SHOOTING IN AFRICA,

By Major H. C. MAYDON (Editor), H.R.H. THE DUKE OF GLOUCESTER, R. AKROYD, Capt. G. BLAINE, Lt.-Col. R. E. DRAKE-BROCKMAN, Major F. D. BROWNE, Major G. BURRARD, A. L. BUTLER, Major A. L. COOPER, Major P. H. G. POWELL-COTTON, SIR A. P. GORDON-CUMMING, BT., Dr. H. L. DUKE, Col. STEVENSON HAMILTON, A. C. KNOLLYS, DENIS LYELL, Capt. A. T. A. RITCHIE, Capt. M. W. HILTON SIMPSON, N. B. SMITH, Col. H. G. C. SWAYNE, Col. J. L. F. TWEEDIE, H. F. VARIAN, R. C. WOOD. ∪ ∪ ∪

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THE
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DEDICATION TO
HIS ROYAL HIGHNESS THE PRINCE OF WALES
&
EDITORS' INTRODUCTION
BY

THE RT. HON. THE EARL OF LONSDALE, K.G., G.C.V.O., D.L.

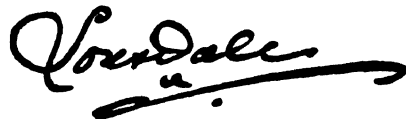
IT is with a deep sense of the honour conferred on the Lonsdale Library of Sports, Games, and Pastimes that the Editors have received permission to dedicate its volumes to His Royal Highness the Prince of Wales. Their first wish is to express their gratitude for being allowed to associate with the Library the name of an acknowledged leader of British Sport in the highest and best meaning of the word.

It is now a long time since a Library of volumes on Sport and Games was first put before the public. During these many years great changes have taken place, in men and in methods; how numerous and how great those changes have been, it needs no more than a glance at the text and illustrations of the older existing volumes to discover. The traditions, the customs, the guiding principles of the great sports and games doubtless remain; but as the years go on new discoveries are made, new developments follow, new methods are found to be successful. In the process of time these demand notice and explanation.

It would not be difficult to give examples of many such changes. A few may suffice. To take the sport of shooting first, even twenty years ago almost nothing was known of the nature and causes of what was vaguely called "disease" in grouse. The knowledge which research and examination have given us of these to-day has profoundly affected methods of moor management. Again, in regard to fishing, it is only of recent years that we have been able to piece together the life history of the salmon by means of the reading of scales; we have learned much of the powers of vision of fish; and there have been many improvements in the manufacture of rods and tackle. To come to games. In cricket there have been alterations

in the rules, fields are placed differently, modes of batting and of bowling are not what they used to be; in golf, changes in the standards of clubs and of the ball have in turn altered standards of play; and the lawn-tennis of modern Wimbledon is a different game from that of a past generation.

It is believed, therefore, that the Lonsdale Library should fill a gap. Its aim is to help and to instruct. It is intended in the first place for the beginner who wishes to learn all that the written word can teach him of his chosen subject, and to obtain authoritative advice on gear and in practice. But it is also hoped that the more experienced sportsmen may find matter of interest in the pages of the Library, either in the bringing together of newly discovered facts or new suggestions for study, or in the comparison of other sportsmen's or players' opinions with his own. No pains have been spared to make the text and the illustrations as full and representative as possible, and if the various volumes succeed in their double appeal to the tyro and to the expert, the Library will have fulfilled the purpose of its Editors, which is, to make it complete.



P R E F A C E

I HAVE just finished reading again Phillipps-Wolley's Introduction to the Big Game Section of the old Badminton Library, and although written thirty-six years ago the theme would apply equally well to-day as then.

Big Game has dwindled woefully, centres have altered, rifles have been improved, motor cars have opened the country, and shooting agencies have lured the sportsmen, all and sundry, and made things as easy as humanly possible.

But the code remains the same.

Kill fairly and sparingly that the Big Game of the world may survive to give sport to those who come after.

The first desire of the young shikari must be to let his gun off, the wish to hunt to kill as often as possible. The wish to make a big bag, with, of course, as many good heads as possible among them.

Later will come the desire to hunt heavy and dangerous game, and last of all, the desire to specialize in rare heads, with a strong leaning towards mountain shooting, since such offers the better stalking.

This is not a hard and fast rule, but it is fairly general, and on this assumption I shall base my argument.

I shall assume that the would-be shikari has a great longing for the three great attractions of Big Game; firstly, travel and exploration, secondly, hunting, and thirdly, collecting, and at the end of it all, in my humble opinion, he will have achieved the greatest desire of all, to wit, to kill as little as possible.

For no man should unavoidably kill Big Game the trophies of which he is not going to keep and treasure, and who is there of us who has house room enough for them all?

But before he reaches the stage of the true collector or specialist, the shikari must serve his novitiate and learn the ropes.

He must have mastered the business of camps and kits. He must have learnt confidence in himself both as a shot and as a shikari, and that he has real zeal for the game. For it is not all easy, and it is only the hard, age-long hunts which yield the real prizes.

Moreover, before he can specialize and taste the essence of hunting, the shikari must have done enough to grow familiar with the common beasts. He must have reached the stage when, although he delights to see game of every species and can name them by a peep of field-glasses, he no longer has any desire to kill.

To reach this state he must have lived long amongst game by force of circumstances or have hunted long and often. He will have shot many species of game and if he has not lived to regret it, he will anyway have no wish to shoot more.

Nevertheless, it is necessary to serve the apprenticeship and to kill common beasts in order to learn the game.

In Africa there are certain centres which lend themselves naturally as the best and easiest headquarters for the A.B.C. of Big Game hunting, such as Kenya, Rhodesia, and the Sudan. It is not proposed to describe such hunts in detail. So many excellent books have been written about them, and the varieties of game are so numerous, that space forbids. Moreover, with the advance of civilization conditions change, and the best habitat of the common species varies almost from year to year.

Roughly speaking, from twenty to forty varieties of game can be found in each of those three districts, and most of them are common.

But if the first shoot or two be made in such localities, partly as a general

shoot and partly to gain experience, it is advisable to aim particularly for several special heads which in future years may form the basis of a good collection.

For example, in the Sudan: Giant Eland, Addax, and Nubian Ibex. In Kenya: Bongo, Hunter's Hartebeest, and a real big Buffalo. In Rhodesia: big Sable and Kudu, both Lechwes, and Puku.

In each such case the route to or return from the habitat of the real prize can be made through good common game country. The problem arises, should the young shikari go for his real prize at once or first gain his experience with the common game? Each individual must answer this himself, guided by opportunity. I can only say that I consider my first two trips to Kashmir were wasted time as I did not make *Ovis Ammon* or *Markhor* my particular objective, and allowed my shikari to satisfy me with Ibex and Shapoo, which are merely side shows. My first trip in Africa (Portuguese Nyasaland) was likewise wasted, as I was too ignorant of African game to know what were treasures, and was beguiled after poor Buffalo and poorer Elephant.

I am not denying the zest and excitement to a beginner to find himself in a country full of game of many varieties. They are all new to him, and each fresh species is an adventure of its own. Unfortunately such surroundings seldom hold a rarity.

To make it easier for future hunters, Africa has in this volume been split up into many districts, each convenient as a natural base. A list of the common game to be found in each district is also given, and such game will often be found to overlap. Where particularly big heads of a species may be expected a note is made, and this is also shown on the map.

There are some who might well have contributed to this volume, and in claiming their indulgence and often their criticism, one's heart is the lighter in knowing that at the root of all are the same maxims: hunt fairly, kill as seldom as possible, and break new country, where no one else has been. It is apparent in every chapter written by every true hunter.

To borrow from H. B., of *Punch*, in his Ode to the followers of Nimrod when in discontent:

" . . . Heeding the words of Nimrod, they packed their spears and went—
Went to the scented mornings, to the nights of the satin moon
That can lap the heart in solace, that can settle the soul in tune.
So they continued the remedy Nimrod of old began—
The healing hand of the Jungle on the fevered brow of man.

.

"Ye who have travelled the Wilderness, ye who have followed the chase,
Whom the voice of the forest comforts, and the touch of the lonely place;
Ye who are sib to the Jungle and know it and hold it good—
Praise ye the name of Nimrod, a Fellow who understood."

Well, they all understand, and although they may dot their I's and cross their T's differently, the lesson and the code at the base of all are the same, "Play the game."

ACKNOWLEDGMENTS

BESIDES offering my sincere thanks to the various people whose chapters and photographs go to make up this volume, I should also like to thank a dozen others for invaluable advice and for the offer of photographs for which, unfortunately, we had not always room.

My thanks are due to the Editors of both the *Field* and *Game and Gun* for permission to reproduce various articles and photographs already issued by them.

To the Editors of *The Times* and *Country Life* for the use of photographs.

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To Mr. H. E. Foster for suggesting a clue to trace some of the very fine photographs which might otherwise have been overlooked.

CONTENTS

PART ONE

Equipment, Rifles, Hunting, Skinning & Medical Information

CHAP.		PAGE
I.	CAMP BUNDOBAST Major H. C. Maydon	17
II.	HUNTING & STALKING Major H. C. Maydon	25
III.	PRESERVING THE SKINS OF LARGE GAME FOR TRANSPORTATION Captain G. Blaine, M.C. . . .	32
IV.	RIFLES FOR BIG GAME Major Gerald Burrard, D.S.O. . . .	41
V.	MEDICAL EQUIPMENT & TREATMENT Lt.-Col. R. E. Drake-Brockman, D.S.O., M.D.	65

PART TWO

Dangerous Game

I.	GENERAL CONSIDERATIONS Major H. C. Maydon	69
II.	LION & LEOPARD Denis D. Lyell	71
III.	LION & LEOPARD Colonel Stevenson Hamilton	75
IV.	THE AFRICAN BUFFALO Captain G. Blaine, M.C. . . .	85
V.	THE AFRICAN ELEPHANT Denis D. Lyell	97
VI.	A RECORD ELEPHANT IN THE EASTERN CONGO Major P. H. G. Powell-Cotton	108
VII.	RHINOCEROS A. C. Knollys and D. D. Lyell	113
VIII.	HIPPOPOTAMUS A. C. Knollys	120

PART THREE

North Africa

SHOOTING IN THE BARBARY STATES	Captain M. W. Hilton Simpson	122
--	--------------------------------------	-----

PART FOUR

Sudan

I.	GENERAL Major H. C. Maydon	127
II.	THE BLUE NILE & ITS TRIBUTARIES A. L. Butler	129
III.	THE GAME ANIMALS OF THE BLUE NILE A. L. Butler	137
IV.	THE BIRDS & SOME ANIMALS OF THE BLUE NILE A. L. Butler	150
V.	THE WHITE NILE Colonel J. L. F. Tweedie, D.S.O. . . .	162
VI.	GIANT ELAND ON THE WHITE NILE Colonel J. L. F. Tweedie, D.S.O. . . .	168
VII.	ADDAX HUNTING IN DONGOLA Major H. C. Maydon	173

PART FIVE

The Western Littoral of the Red Sea

CHAP.		PAGE
I. GENERAL	Major H. C. Maydon	193
II. RED SEA HILLS & ERITREA	Major H. C. Maydon	197
III. A SIX MONTHS' SHOOT IN ABYSSINIA	Major H. C. Maydon	210
IV. MOUNTAIN NYALA IN SOUTHERN ABYSSINIA	H.R.H. The Duke of Gloucester	228

PART SIX

Somaliland

I. GENERAL	Major H. C. Maydon	230
II. NORTHERN SOMALILAND	Colonel H. G. C. Swayne	234
III. SPOORING LIONS	Norman B. Smith	240
IV. ANTELOPES	Lt.-Col. R. E. Drake-Brockman, D.S.O., M.D.	246

PART SEVEN

Kenya

I. GENERAL	Captain A. T. A. Ritchie	250
II. BONGO-HUNTING IN KENYA	Major H. C. Maydon	259

PART EIGHT

Uganda

I. GENERAL	A. C. Knollys	267
II. THE COUNTRY & ITS GAME	Dr. H. L. Duke	276
III. LUCK IN ELEPHANT-SHOOTING IN UGANDA	A. C. Knollys	300

PART NINE

The Northern Area of Tanganyika Territory

I. GENERAL	Major E. D. Browne, O.B.E.	304
II. THE FRINGE-EARED ORYX (<i>Oryx b. callotis</i>)	H.R.H. The Duke of Gloucester	308
III. HUNTING IN NORTHERN TANGANYIKA TERRITORY	Major E. D. Browne, O.B.E.	309

PART TEN

Nyasaland

I. GENERAL	Rodney C. Wood	315
II. NYALA HUNTING	Rodney C. Wood	321

PART ELEVEN

Northern Rhodesia

CHAP.		PAGE
I.	GENERAL <i>Denis D. Lyell</i>	328
II.	THE GAME OF NORTHERN RHODESIA <i>Denis D. Lyell</i>	330
III.	NOTES ON "ACINONYX REX" (COOPER'S CHEETAH) <i>Major A. L. Cooper, D.S.O.</i>	335
IV.	RED & BLACK LECHWE <i>Captain G. Blaine, M.C.</i>	337
V.	SITUTUNGA <i>Captain G. Blaine, M.C.</i>	340

PART TWELVE

South Africa

I.	GENERAL <i>Major H. C. Maydon</i>	342
II.	GEMSBUCK <i>Colonel Stevenson Hamilton</i>	344
III.	ZULULAND NYALA <i>Major H. C. Maydon</i>	351
IV.	BIG GAME IN THE EARLY DAYS <i>Sir A. P. Gordon Cumming, Bt.</i>	358

PART THIRTEEN

SOUTH-WEST AFRICA <i>Colonel H. G. C. Swayne</i>	366
--	-----

PART FOURTEEN

ANGOLA, PORTUGUESE WEST AFRICA <i>H. F. Varian</i>	371
--	-----

PART FIFTEEN

French Equatorial Africa

I.	GENERAL <i>Major P. H. G. Powell-Cotton</i>	388
II.	THE GIANT FOREST HOG <i>Major P. H. G. Powell-Cotton</i>	392
III.	SITUTUNGA <i>Major P. H. G. Powell-Cotton</i>	395
IV.	GIANT ELAND <i>R. Akroyd</i>	398

APPENDIX ONE

GAME DISTRIBUTION	403
-----------------------------	-----

APPENDIX TWO

GAME ORDINANCES:

<i>Sudan Game Laws: Fees for Licences</i>	406
<i>Epitome of Kenya Game Laws</i>	410
<i>Extract from Uganda Game Ordinance: Game Licences</i>	415
<i>Tanganyika Territory</i>	421
<i>Extract from Somaliland Protectorate Game Ordinance</i>	427
<i>Nyasaland</i>	430
<i>Northern Rhodesia</i>	431
<i>Extract from Sierra Leone Game Ordinance</i>	434
<i>Extract from Nigeria Game Ordinance</i>	435
INDEX	439

LIST OF PLATES

PLATE		Frontispiece FACING PAGE
1.	VITAL SHOTS ON THE ELEPHANT <i>Photo: Marcuswell Maxwell.</i>	
2.	CAMP AT WAD EL HARAZ <i>Photo: Major H. C. Maydon.</i>	18
3.	CAMP IN SOMALILAND <i>Photo: Major H. C. Maydon.</i>	18
4.	NATIVE-BUILT SHELTER IN ZULULAND <i>Photo: Captain G. Blaine.</i>	18
5.	VITAL SHOTS ON SOFT SKINNED GAME <i>Photo: W. S. Berridge.</i>	26
6.	SABLE ANTELOPE <i>Photo: Norman B. Smith.</i>	28
7.	GIANT ELAND <i>Photo: Captain G. Blaine.</i>	28
8.	GIANT SABLE <i>Photo: Captain G. Blaine.</i>	28
9.	ROAN ANTELOPE <i>Photo: R. L. Scott.</i>	28
10.	LION <i>Photo: Lady Broughton.</i>	72
11.	CHEETAH <i>Photo: W. S. Berridge.</i>	80
12.	LEOPARD <i>Photo: Captain G. Blaine.</i>	80
13.	SHOULDER AND NECK SHOTS ON THE BUFFALO <i>Photo: W. S. Berridge.</i>	88
14.	HEART SHOT ON THE BUFFALO <i>Photo: Major P. H. G. Powell-Cotton.</i>	88
15.	VITAL SHOTS ON THE ELEPHANT <i>Photo: Marcuswell Maxwell.</i>	99
16.	NECK AND HEART SHOTS ON THE BLACK RHINOCEROS <i>Photo: W. S. Berridge.</i>	114
17.	BLACK RHINOCEROS IN KENYA <i>Photo: Marcuswell Maxwell.</i>	114
18.	HIPPOPOTAMUS <i>Photo: Marcuswell Maxwell.</i>	120
19.	YOUNG HIPPOPOTAMUS IN TANGANYIKA <i>Photo: Lieut.-Commr. P. V. McLaughlin, R.N.</i>	120
20.	CUVIER'S, OR ATLAS GAZELLE <i>Photo: W. S. Berridge.</i>	122
21.	BARBARY SHEEP <i>Photo: W. S. Berridge.</i>	122
22.	ADDRA GAZELLE <i>Photo: Major H. C. Maydon.</i>	127
23.	ADDAX <i>Photo: Major H. C. Maydon.</i>	127
24.	WHITE ORYX <i>Photo: Captain G. Blaine.</i>	127
25.	GEMSBUCK <i>Photo: Captain G. Blaine.</i>	127
26.	DEFASSA WATERBUCK <i>Photo: W. S. Berridge.</i>	142
27.	ELAND <i>Photo: W. S. Berridge.</i>	142
28.	BUSHBUCK OR HARNESSSED ANTELOPE <i>Photo: W. S. Berridge.</i>	144
29.	REEDBUCK <i>Photo: W. S. Berridge.</i>	144
30.	KUDU <i>By kind permission of the Trustees of the National History Museum, South Kensington.</i>	146
31.	GIANT ELAND <i>Photo: Major P. H. G. Powell-Cotton.</i>	162
32.	GROUP OF NYAM NYAM NATIVES AT WAU, S. SUDAN <i>Photo: Lieut.-Col. J. L. F. Tweedie.</i>	162

PLATE	FACING PAGE
33. SHILLUKS IN AMBATON CANOE <i>Photo: Lt.-Col. J. L. F. Tweedie.</i>	164
34. ANUAK VILLAGE ON SOBAT RIVER <i>Photo: Lt.-Col. J. L. F. Tweedie.</i>	164
35. NILE STEAMER BLOCKED IN SUDD—UPPER NILE <i>Photo: Lt.-Col. J. L. F. Tweedie.</i>	164
36. THE LATE CAPT. F. C. SELOUS HOLDING A GREATER BUSTARD <i>Photo: Lt.-Col. J. L. F. Tweedie.</i>	167
37. A GOOD WHITE RHINO <i>By kind permission of the Duke of Sutherland.</i>	167
38. GIANT OR DERBY ELAND <i>Photo: Rowland Ward.</i>	170
39. ARMADILLO <i>Photo: Lt.-Col. J. L. F. Tweedie.</i>	170
40. A BARBARY SHEEP <i>Photo: Major H. C. Maydon.</i>	181
41. ADDAX BULL SHOT IN DONGOLA DESERT <i>Photo: Major H. C. Maydon.</i>	181
42. ADDAX BULL IN CAPTIVITY <i>Photo: W. S. Berridge.</i>	181
43. ADDRA GAZELLE <i>Photo: Captain G. Blaine.</i>	184
44. ADDRA GAZELLE <i>Photo: W. S. Berridge.</i>	184
45. WHITE ORYX <i>Photo: Captain G. Blaine.</i>	188
46. WHITE ORYX <i>Photo: W. S. Berridge.</i>	188
47. KUDU <i>Photo: Major H. C. Maydon.</i>	194
48. WHITE-EARED KOB <i>Photo: Major H. C. Maydon.</i>	194
49. MRS. GRAY'S LECHWE <i>Photo: Major H. C. Maydon.</i>	194
50. NUBIAN IBEX <i>Photo: Major H. C. Maydon.</i>	200
51. WALIA IBEX <i>Photo: Major H. C. Maydon.</i>	200
52. AN ABYSS IN THE LOFTY SCARP <i>Photo: Captain G. Blaine.</i>	215
53. THE CATHEDRAL ROCK <i>Photo: Captain G. Blaine.</i>	215
54. THE FUNNEL, OR KEY, TO THE DESCENT OF GERCH CLIFFS <i>Photo: Captain G. Blaine.</i>	215
55. WALIA IBEX, MALE AND FEMALE <i>Photo: Major P. H. G. Powell-Cotton.</i>	218
56. MOUNTAIN BUSHBUCK <i>Photo: Major H. C. Maydon.</i>	218
57. WALIA IBEX <i>Photo: Captain G. Blaine.</i>	218
58. NUBIAN IBEX <i>Photo: Reginald Loder.</i>	222
59. GIANT ELAND <i>Photo: Major P. H. G. Powell-Cotton.</i>	222
60. MOUNTAIN BUSHBUCK OR NYALA <i>By kind permission of H. R. H. the Duke of Gloucester.</i>	229
61. A GOOD MANED LION <i>Photo: Captain G. Blaine.</i>	234
62. LESSER KUDU <i>Photo: Captain G. Blaine.</i>	234
63. KUDU <i>Photo: Captain G. Blaine.</i>	234
64. BEIRA ANTELOPE <i>Photo: Major H. C. Maydon.</i>	236
65. DIBATAG <i>Photo: Major H. C. Maydon.</i>	236
66. GERENUK <i>Photo: Captain G. Blaine.</i>	236
67. A MANED LION <i>Photo: J. L. Hewes.</i>	253
68. LIONS IN THE HEAT OF THE DAY <i>Photo: Marcuswell Maxwell.</i>	253

PLATE	FACING PAGE
69. HUNTER'S HARTEBEEST <i>Photo : Captain G. Blaine.</i>	254
70. LESSER KUDU <i>Photo : Norman B. Smith.</i>	254
71. RHODESIAN BUFFALO <i>Photo : Captain G. Blaine.</i>	254
72. FRINGE-EARED ORYX <i>Photo : Captain G. Blaine.</i>	256
73. HUNTER'S HARTEBEEST <i>Photo : Captain G. Blaine.</i>	256
74. ORYX BEISA <i>Photo : Major P. H. G. Powell-Cotton.</i>	256
75. HUNTER'S HARTEBEEST <i>Photo : Rowland Ward.</i>	259
76. BONGO <i>Photo : Rowland Ward.</i>	259
77. BONGO BULL <i>By kind permission of "The Field."</i>	260
78. BUFFALO IN COVER <i>Photo : Marcuswell Maxwell.</i>	260
79. DEFASSA WATERBUCK <i>Photo : Marcuswell Maxwell.</i>	278
80. BLUE WILDEBEEST <i>Photo : Marcuswell Maxwell.</i>	278
81. ELEPHANT <i>Photo : Marcuswell Maxwell.</i>	283
82. EAST AFRICAN BUFFALO <i>Photo : D. Garnett.</i>	291
83. LION <i>By kind permission of H.R.H. the Duke of Gloucester.</i>	296
84. WATERBUCK <i>Photo : Major P. H. G. Powell-Cotton.</i>	302
85. ELEPHANT ABOUT TO CHARGE <i>Photo : Major P. H. G. Powell-Cotton.</i>	302
86. WHITE RHINOCEROS <i>Photo : Major P. H. G. Powell-Cotton.</i>	302
87. A GROUP OF GIRAFFES AT CLOSE QUARTERS <i>Photo : Marcuswell Maxwell.</i>	306
88. ZEBRAS <i>Photo : Marcuswell Maxwell.</i>	306
89. FRINGE-EARED ORYX <i>By kind permission of the H.R.H. Duke of Gloucester.</i>	308
90. IMPALA ON THE PLAINS <i>Photo : Marcuswell Maxwell.</i>	310
91. ELAND GRAZING <i>Photo : Marcuswell Maxwell.</i>	310
92. WATERBUCK <i>Photo : Lt.-Col. J. L. F. Tweedie.</i>	330
93. MRS. GRAY'S LECHWE <i>Photo : Captain G. Blaine.</i>	330
94. WHITE-EARED KOB <i>Photo : Lt.-Col. J. L. F. Tweedie.</i>	330
95. BLACK LECHWE <i>Photo : Captain G. Blaine.</i>	330
96. RED LECHWE (ABNORMAL SPREAD OF HORNS) <i>Photo : Captain G. Blaine.</i>	330
97. RED LECHWE <i>Photo : Captain G. Blaine.</i>	330
98. A WELL-SHAPED BUFFALO HEAD <i>Photo : Colonel P. J. Bailey.</i>	332
99. BLACK LECHWE <i>Photo : Captain G. Blaine.</i>	332
100. SASSABY <i>Photo : Captain G. Blaine.</i>	332
101. RED LECHWE <i>Photo : Captain G. Blaine.</i>	332
102. SITUTUNGA <i>Photo : Captain G. Blaine.</i>	335
103. KING CHEETAH <i>Photo : Major Cooper.</i>	335
104. CAPE BUFFALO <i>Photo : Captain G. Blaine.</i>	335

PLATE		FACING PAGE
106.	ELAND <i>Photo : Captain G. Blaine.</i>	335
106.	VAAI REEBOK <i>Photo : W. S. Berridge.</i>	342
107.	BONTBOK <i>Photo : W. S. Berridge.</i>	342
108.	BLESBOK <i>Photo : W. S. Berridge.</i>	342
109.	WHITE-TAILED GNU OR BLACK WILDEBEEST <i>Photo : W. S. Berridge.</i>	342
110.	NYALA <i>Photo : Major H. C. Maydon.</i>	352
111.	GEMSBUCK <i>Photo : Major H. C. Maydon.</i>	352
112-117.	MEMORIES OF R. GORDON-CUMMING <i>Photos : Sir A. P. Gordon-Cumming, Bt.</i>	360
118.	FOREST HOG <i>Photo : Major P. H. G. Powell-Cotton.</i>	373
119.	ROAN <i>Photo : Major P. H. G. Powell-Cotton.</i>	373
120.	GIANT SABLE <i>Photo : Major P. H. G. Powell-Cotton.</i>	373
121.	ANGOLA IMPALA <i>Photo : Major P. H. G. Powell-Cotton.</i>	373
122.	A YOUNG GEMSBUCK <i>By kind permission of Ottmar Spaeth.</i>	380
123.	SPRINGBUCK <i>Photo : Captain G. Blaine.</i>	380
124.	GIANT SABLE <i>Photo : Captain G. Blaine.</i>	384
125.	HARTMAN'S ZEBRA <i>Photo : Captain G. Blaine.</i>	384
126.	ANGOLAN BUFFALO <i>Photo : H. F. Varian.</i>	384
127.	COMPARISON IN HEADS OF THE GIANT AND TYPICAL SABLE ANTELOPE <i>Photo : H. F. Varian.</i>	384
128.	YELLOW-BACKED DUICKER <i>Photo : Major P. H. G. Powell-Cotton.</i>	392
129.	BLACK FOREST HOG <i>Photo : Major P. H. G. Powell-Cotton.</i>	392
130.	FOREST BUFFALO <i>Photo : Major P. H. G. Powell-Cotton.</i>	392
131.	ADDAX <i>Photo : Major P. H. G. Powell-Cotton.</i>	396
132.	WHITE ORYX <i>Photo : Major P. H. G. Powell-Cotton.</i>	396
133.	SITUTUNGA <i>Photo : Major P. H. G. Powell-Cotton.</i>	396
134.	WESTERN KOB <i>Photo : Major P. H. G. Powell-Cotton.</i>	396
135.	GIRAFFE <i>Photo : Major P. H. G. Powell-Cotton.</i>	398
136.	GIANT ELAND <i>Photo : Major P. H. G. Powell-Cotton.</i>	398
137.	BONGO <i>Photo : Captain G. Blaine.</i>	398
138.	BONGO <i>Photo : Captain G. Blaine.</i>	404
139.	MOUNTAIN NYALA <i>Photo : Major H. C. Maydon.</i>	404
140.	SITUTUNGA <i>Photo : Captain G. Blaine.</i>	404
141.	ZULULAND NYALA <i>Photo : Captain G. Blaine.</i>	404

BIG GAME SHOOTING IN AFRICA

PART ONE

EQUIPMENT, RIFLES, HUNTING, SKINNING & MEDICAL INFORMATION

CHAPTER ONE

CAMP BUNDOFAST

By MAJOR H. C. MAYDON

*"He [Nimrod] knew the troubles of tracking, the business of Camps and Kits,
And the pleasure that pays for the pain of all, the ultimate shot that hits."*

I WISH that I knew "H. B.," whose verses in *Punch* have delighted the hearts of so many of us, we who can recognize his master touch and all the essence of big game shoots, so aptly put.

I am sure that it is just that "business of Camps and Kits" that makes the young would-be hunter hesitate and then lose his opportunity, when the leave comes round. Not that the world wants too many hunters: yet those of the right stuff are better protection of game than any game laws—anomalous as it may sound. For it is the very spirit of knowing the fauna, and loving them as a splendid quarry, that creates the spirit of playing the game and making others play it. The man who would as lief tell on a pal as shoot game from a motor car, will do his damndest to see that no other breaks the unwritten law.

But it is camps and kits that we would discuss, although these are dependent on the fields of the hunt, which are a far wider subject.

Be it Africa or India—hot or cold—the rudiments are the same; the details only differ. In fifty per cent. of shooting books the author gives long lists of stores and equipment which should be taken, and, with all due respect, I beg to protest. Our pockets are not all lined alike, and one man's meat poisons his pal.

In many treks since the War, in both Africa and Asia, I have satisfied myself that trekking is the cheapest way of living if you must have hunting; that the cost of such a life is not more than 33 per cent. upon pre-War, and that the average is from £30 to £40 per month per gun in any country. It is the bundobast on such a scale that I propose to discuss.

The rudiments then are: tent, camp furniture, roll of bedding, box of shooting kit and guns.

Addenda are:

- (a) Stores,
- (b) Local oddments,
- (c) Servants.

The maxim is: the minimum of everything and lightness. When in doubt, leave it behind. Yes, I heard that scoffer's grunt. But the alternative is treble your baggage and still not have that one thing wanted to-day and never before or since.

The man who really shoots and never lets an opportunity slip is always ready. His rudimenta are always there—packed and waiting. Let us go through them. You experts won't agree, but you can always jeer.

(1) *Tent*.—40-lb. double fly—Indian khaki drill or sail cloth (not Green Willesden canvas, which attracts heat as a magnet does steel) as supplied to officers in India from Elgin Mills, Cawnpore. Two poles and ridge. Just room inside for two camp beds and small table; so it will accommodate one in comfort and two at a pinch. Cost, £4 or £5. This is an easy coolie or half-mule load, even if wet or with Christmas-tree appendages.

Servants' Tent.—I always collect locally at shoot base. At the worst, a roll of Americani cloth (coarse, cheap cotton) can be rapidly sewn into shape, but I have seldom found a place where a makeshift can't be procured. Where soldiers or trekkers have been, there are their relics.

(2) *Camp Furniture*.—Collapsible canvas camp bed. X-pattern canvas table (large size), both in one home-made double bag.

(3) *Deck Chair*.—Here is source for argument, but I have tried them all and have finally come back to the fool-proof article which does not require an expert to erect and half an hour of his priceless time when camp is reached late.

Ground sheet—canvas—and as light as you can get; about 9×9 ft. Useful for putting over baggage on a wet night, and as tent carpet. It lives with tent.

A small spare strip of canvas, in bedding. As floor mat when ground sheet is required outside, and for repairs.

(4) *A Candle Lantern Box*.—Here is more meat for discussion. But the old Egyptian army brought trekking to a fine art and fixed on a special box containing two candle reading-lamps with springs and three glass globes. Spare globes are procurable almost anywhere in Africa, and candles do burn. I have tried both carbide and electric lamps, and they do not always achieve their destiny. Candle lantern boxes from most outfitting firms in London.

In India and Persia, where paraffin is easily obtainable, the old hurricane lamp is hard to beat. But my candle lantern box remains as a fixture among my *Penates*.

Housewife and repair outfit. The first, pocket size, in clothes box.

N.B.—Plenty of darning wool and needles a man can thread. The repair outfit packs in the gun case. Cobbler's needles, thread and wax. A few nails and screws. A hank of wire. Pliers, screw-driver and handy knife. Finally, an "ADZE," if you can buy one: that handy tool, with hammer at one end and a hoe at the other, with a nail-extracting hole in the centre. With this tool you can open and shut store boxes, cut a trench round the tent, and even break firewood at a pinch.



Plates 2—4

CAMPS

Top. AT WAD EL HARAZ, ON THE FRINGE OF THE DONGOLA DESERT.

Centre. IN SOMALILAND.

Bottom. ZULULAND. THE TWO TOP PICTURES SHOW THE DOUBLE FLY TENT
SPOKEN OF IN THE TEXT, AND THE LOWER A NATIVE BUILT-SHELTER.

Machete or axe is best procured locally, according to local knowledge. Skinning knife lives on your belt, plus a knife with a tin-opener and corkscrew. The softer the steel the better your saw-edge for skinning.

(5) "*Chelumche*" or "*Tishti*" (*anglice* washing-basin).—A large, deep enamel basin with a leather top and a leather inside. This last item divided into four compartments, which contain sponge and shaving tackle, handy medicine bottles, towel, etc.

A medicine chest (or not) according to taste. Each individual understands his own failings best. If not, consult a chemist.

(6) *Roll of Bedding*.—I have cast the genus valise. I now use two canvas dirty-linen bags, one inside the other, and the outer one longer and larger than the inner. Thus, when the smaller sack is packed and bursting, I still have a few more cubic inches outside the smaller but inside the larger sack. I find the two sacks much lighter than a valise. The inner sack can be swivelled round inside the outer one each time, so that wear and tear is distributed. The contents of the inner sack are always kept dry. Either sack can be easily replaced at almost any stopping-place.

The disadvantage is when packing or retrieving a collar stud without unpacking. The answer is, eschew collar studs, and, in any case, you want your bedding out every night.

The contents of the bedding roll are: a Jaeger flea-bag, two blankets, a small pillow and a mosquito net (sand-fly proof, if possible). If you are going to a cold country, add one *resai* (or light mattress), one *poshteen* (or fur-lined coat) and a blanket or two. One warm overcoat. No sheets required, but two spare pillow-cases, if you're proud.

By the way, you may be a sybarite, and I've not mentioned a bath! I use my basin and the canvas ground sheet. I've had quite a good bath out of a pint cup before now, but various patterns of canvas baths are procurable.

(7) *Box of Shooting Kit*.—The box, light tin or split cane, of a size that cannot carry more than 60 lbs. weight, and you must model your kit on that. If you want civilized clothes, they must be carried in some bag outside the rudimenta and dumped at the base.

Contents: well, you can get through on two of everything, khaki drill for hot countries, khaki flannel for cold. Personally, I favour slacks and canvas leggings, varied by a pair of shorts or a pair of plus fours for hot or cold climates. I don't fancy thick shooting-coats, as you can skin off one or two woollies, but a heavy coat is awkward to carry. So two woollies at least, and if you are going to cold parts a pair of home-made woolly overalls to sleep in; they are the best value I know.

Two pairs of shooting boots, one nailed, one crêpe rubber soled; one pair Gilgit boots (numdah- (felt) topped, thigh-high) for cold, or one pair thigh-high mosquito boots for the tropics. One pair slippers.

Balaclava cap and wool gloves for the cold.

Socks, handkerchiefs, underclothes according to taste and the fullness of your box. Don't forget camera and field-glasses, which live in my clothes box.

Here I have mentioned about one-hundredth part of what you will think you will want—when you pack. Don't think; leave it behind. Improvising yourself is much better fun than reading *Swiss Family Robinson*,

and if you begin stretching points, your first shoot may be your last. One thing that won't pack is the beginning of a new box. And one new box is going to cost one extra coolie or half a mule or quarter of a camel hire per day.

(8) and (9) *Guns*.—This ground is too treacherous for me. I hesitate, lest the throwing of a pebble should raise an earthquake. I carry a 12-bore shotgun and a 7·9 mm. Mauser Sporting Carbine. The last has killed most things clean, bar Elephant, Buffalo, Bison and Rhino, for which I count nothing reliable under a double ·470. To a poor shot who prefers a close stalk to a long shot, a telescopic sight is no attraction. A carbine is handy for crawling through bush with the rifle slung. An old cheap s.b. shotgun, that never wants cleaning—nor to be kept in its case—and is thus always handy on the march, and is a good stand-by present to a sheikh or a sirdar who has done you well, might be the ideal thing. A ·22-bore rifle is amusing and useful for the pot.

Cut out revolvers and their tribe as you would the plague. They are the bugbear of all Customs and are quite futile. If you are up against it, try a 12-bore—otherwise bluff.

One thing I have never carried in my arsenal, but which might be invaluable, is a Verey light pistol. Leave it in camp with your servants (after instructing them in its use) with orders to fire it in the air as a signal any night that you are not back in camp an hour after dark. I have not often been lost, chiefly since I never trust my own homing instinct and always take a native, but being lost is one of the most unpleasant feelings I know, especially in waterless country. A Verey light can be seen ten miles away.

A Verey cartridge might also be adjustable for night shooting. A Verey pistol display can also be guaranteed to impress the natives, a sentiment not without advantages in some parts.

So much for the permanent rudimenta of camp life.

Now for the addenda.

These are the things to be collected when the die is cast, plans are made, and dates and destination have been decided.

(a) *Stores*. Again I am on thin ice.

If the trek has been planned from home and the base is to be a port or near a port (such as Port Sudan, Asmara, Beira, Nairobi, Berbera), it is well worth taking the bulk of one's stores from home, properly packed in chop boxes up to 60 lbs. weight each.

Commodity stores such as flour, sugar, vegetables, rice, tea, etc., can always be obtained at the local base.

Now for the details. In the Sudan, where we messed individually, we had worked out each tin to a nicety: 1 lb. of tea, jam, sugar, etc., for one person so many days. I will keep to that scale approximately, but you must watch your cook.

Take each meal separately and think what you eat.

For one Person :

Breakfast.—Porridge, 1 lb. Quaker Oats, ten days.

Sugar, 3 lbs. a week.

Milk, one 12-oz. tin per day, or, say, 20 per month. (Never safe to rely on fresh milk supply.)

Eggs, local supply on trek.

Bacon, 1 lb. or tin per week.
 Sausages, 1 lb. tin a week (luxury).
 Marmalade, 1 lb. per week.
 Bread, fresh, as much as you can carry.
 Flour, 20 lbs. per month.
 Baking powder, 2 tins per month. A good cook carries his own kamira or yeast.

Pepper, 1 small pot per month.
 Salt, $\frac{1}{2}$ lb. per week.
 Mustard, 1 two-oz. tin per month.
 Worcester Sauce, 2 small bottles per month.
 $\frac{1}{2}$ lb. tea, $\frac{1}{2}$ lb. coffee, $\frac{1}{4}$ lb. cocoa per week.
 Butter, 1 lb. per week (luxury).

Pocket Reserve: Almonds and raisins, $\frac{1}{2}$ lb. per week.

Lunch.—Generally eaten on trek or out stalking):

Bully, 1 tin per week.
 Potted meat, 2 tins per week.
 Sardines, 2 tins per week.
 Biscuits, one 2-lb. tin per week.
 Bread and tea, *vide* above.
 Jam, 1 lb. per week.
 Cheese, $\frac{1}{2}$ lb. per week.

Tea.—Tea and biscuits, *vide* above.

Currants for cakes, 1 lb. per month.

Dinner.—Lard for cooking, 1 lb. per week.

Soup squares, $\frac{1}{2}$ square per day, plus game meat.

Tinned fish (?), to taste.

Fresh meat, as shot or bought.

Bully (emergency), *vide* above.

Other tinned meat (emergency), to taste; four for whole trip.

Mixed dried fruits, 1 $\frac{1}{2}$ lbs. per week.

Rice, $\frac{1}{4}$ lb. per week.

Plum puddings (luxury), 1 lb. tin per month.

Mince meat (luxury for mince pies—excellent), two 1-lb. tins per month.

Tinned peas, etc., 1 lb. tin per week.

Dried vegetables, 1 lb. per week.

Onions, 2 lbs. per week.

Potatoes, 3 lbs. per week.

Curry powder, chutney, sauces, 1 per month.

Whisky, 1 bottle per week.

Rum (excellent luxury in a cold climate).

A few extras, according to taste, such as chocolates, tobacco, and any small luxuries.

(b) *Local Oddments.*

By these I mean necessities which are best procured at the actual starting point if possible, such as:

Two empty petrol tins for boiling or fetching water.

Half a dozen canvas water-bags, more or less, according to climate. These are certainly the best form of water-bottle in a hot climate, as they keep the water cold. Two go to the kitchen—two in use and two spare.

A pound of alum for cleaning drinking water and drying out skins.

Candles and matches: one packet per week each.

Soap for kitchen and clothes, two cakes per week.

Six dusters and washing-cloths.

A dozen thin canvas or linen bags, about 12×9 inches square, as boot bags, dried fruit, bread, rice, tiffin, etc., containers. You will soon run out of paper, and there are a dozen uses for such bags.

Three or four glass jars with screw-on tops for jam, butter, etc., when the tin has been opened. For economy of space, buy half your jam and marmalade in such jars, the rest in tins.

One haversack or canvas nose-bag as tiffin basket. The easiest method of carrying on camel or mules or coolie back. It contains all you want, including a kettle for tea. Tastes differ, but personally I would as soon go out for the day without my boots as without my kettle and tea. Be it the panacea of blighted hopes, the crowning joy of a successful stalk, or merely the daily pick-me-up after a long morning march, that welcome cup of tea is always indispensable and something to look forward to. Lose your caravan itself and life is still bearable while you have tea in your haversack.

Table and kitchen crockery, etc., for one person.

A nest of three aluminium cooking-pots.

One large kettle.

One small kettle for tiffin bag.

One frying-pan.

Four enamel plates; one meat dish; one pudding dish.

Three knives; three forks; two spoons; two teaspoons.

One enamel mug (reserve).

Two china bowls (or sultaneahs) as cup, glass, soup or porridge bowl. Pleasanter than enamel; no handle to break; cools liquid quickly and has room for a thirst.

Two tablecloths; two napkins.

Any small particular fancies of your local cook, such as whisks, cook's knife and fork, basin for mixing flour, bread oven, and, in the Sudan, a "Canoon" or bazaar-made fire-grate.

In cold climates a paraffin stove for your own tent is priceless. In woodless parts a Primus stove for the kitchen.

(c) *Servants*. Again I am on thin ice.

This is a most serious question on which the success, or, at least, enjoyment of a whole expedition may depend.

A cook and a personal servant are essential, though the cook may be shared among a party of two or three. It is imperative that they should be servants used to trek-life and not the town-bred corner-boy type. They are practically always obtainable at the starting-point base, for example:

For British East Africa, at Nairobi. Very good.

Rhodesia, at Livingstone. Very good.

Sudan, at Khartoum. Good, if carefully chosen.

Eritrea, at Asmara, doubtful; Abyssinia, at Adis Ababa, doubtful. Best taken from Port Sudan.

Somaliland, at Berbera. Very good. Arrange beforehand.

South Africa, anywhere. Generally very good.

But to obtain the best results English-speaking servants should be

avoided if possible. For this reason the Sahib should do his best to obtain a smattering of the language. It's wonderful what can be done in three months. In my experience, a raw native would much rather have dealings with his master blessed with a smattering than through an interpreter. Moreover, when compelled to use a lingua franca, it is better that it be in another native language, however badly spoken, than in English. Probably the alien native will speak it badly too, and thus understand you better, and, in any case, he will consider you a man who understands natives and not a raw European. For example, a smattering of Arabic and Swahili will carry you through most of the shoots on the list.

All I ask of my cook is that he should be able to make good bread on trek and the rest will follow.

If the personal boy is a good lad and loyal, he will soon learn the routine of packing and unpacking. The rest is up to you.

As for shikaris and transport, these depend on local conditions and experience. From any known base they will provide themselves.

For the out-of-the-way expeditions you must rely on your own experience. By that time you will be hunting one special quarry that lives in one restricted area. There will be, probably, only one form of transport that will get you there—to be discovered at your base—and shikaris will best be obtained on the spot where the quarry lives.

Most country-bred natives in a game country are hunters by instinct, and the common bond of hunting will make you the best friends in the world. Though the townee may gossip that you are out for mining or trading rights, the countryman will understand. Once teach him that it is only big heads you want and that you are out to hunt and not to kill and that even a wonderful Feringhi rifle is only reliable (with luck) at 100 yards, and you have made a good man. What is more, by that time you have probably made a staunch friend.

(d) *Medicines.*

My own ideas of medicines are:

(1) Look after your *tummy*—hence, carry plenty of pills or oils as suit you best, plus lots of Epsom Salts for natives.

(2) *Cold* cures and preventives, also as suit you. Quinine, aspirin, Sloane's liniment, cough lozenges, and permanganate of potash for gargles are my A B C.

(3) Fever.—Quinine (5 gr. a day as preventive) and aspirin.

(4) Wounds and scratches.—Peroxide, iodine, and permanganate of potash. A few bandages and cotton wool.

Citronella oil to keep off mosquitos, etc. Sulphur ointment and Keatings for bugs.

Boil all water and use alum to make the mud sink.

For anything else make for the nearest doctor.

A small wooden phial of permanganate of potash and scalpel combined, plus a field dressing, to rest at the bottom of the cartridge bag and never to be removed.

You may never need it, but you have unarmed followers with you, shikaris and beaters, who often get scragged, bitten, etc., and it is good to be able to administer first aid on the spot.

It is presumptuous to try to write this ABC of shoot Bundobast for

the old hands, who probably disagree *in toto*, or for the new, who won't care. There is only one method: go out and learn for yourself.

But after a lifeful of the game, I am sure that the best maxim is "Be comfortable." For comfort gives health, and health is the key to all the zest of life.

For the game itself, it is the best: there is no other. If you have tried it, you know. If you haven't, life is still young.

CHAPTER TWO

HUNTING & STALKING

By MAJOR H. C. MAYDON

THERE are, roughly, three distinct sorts of hunting ground in Africa: (1) Mountains; (2) Plains; (3) Jungle.

There are two sorts of Game: (A) Dangerous: (1) thin-skinned, (2) thick-skinned; (B) Non-dangerous.

(1) Mountains, such as the western littoral of the Red Sea for both Nubian and Walia Ibex.

Or isolated hills in the desert, such as Dongola, for Barbary Sheep.

(2) Plains, such as Kenya, for most common game; such as Sudan, for common game; such as Sudan Desert, for Addax; such as Kalahari Desert, for Gemsbuck. Includes sparse bush and true desert.

(3) Jungle, *i.e.* heavy forest, such as Abyssinia, for Mountain Bushbuck (Nyala) (*Tragelaphus buxtoni*); such as Zululand, for Nyala (*Tragelaphus angasi*); such as Kenya, for Bongo; such as West Africa, for Bush Cow and Little Red Forest Buffalo (*S. nanus*).

(A) and (B) Dangerous game is practically contained in No. 2 group; as you would not, for choice, hunt dangerous game in real dense forest, although spoor and opportunity may carry you there in pursuit.

Now let us leave dangerous game out of it for the nonce. They will be referred to later. I want to discuss the different sorts of country for non-dangerous game and the change in hunting methods for each locality.

(1) *Mountains.*

This is spying and spotting work followed by a long stalk, often under very trying and difficult conditions. The climate is generally good, so, for the best results, it is as well to be prepared to spend the whole day out of camp, carrying lunch, kettle, and water.

Good field-glasses and a telescope (if you like it) are essential. Your shikari can generally use field-glasses, so a spare pair is useful.

I have found crêpe rubber soled boots the best for mountain work in Africa, though nailed boots are rarely preferable, in case of rain or slippery grass slopes.

Practically always, it is easier to spot your quarry very early in the morning or in the evening, when they are on the move, either grazing or coming down to or returning from a drink in the nullah beds.

An early morning spy often means the chance of a shot by midday, an evening spy the postponement of the stalk till next day. The last is always unsatisfactory, as the game may have moved away, and, in any case, has to be re-located.

The first sight is usually made at 1000 yards or more, when it is almost impossible to judge the size of heads. The approach stalk should bring you to, say, 300-400 yards, when it can be decided if the quarry carry

big enough heads or not. The close stalk may, with luck, bring you to within 20-100 yards of your beast.

My own theory is, that the approach stalk is much more tricky than the close stalk, and demands even more caution. The wind is your chief enemy and is more likely to be set steady at close distances. You may also have passed within the zone of vigilance of the ewe sentries. Don't worry about noise, except human voices and ring of metal.

Don't forget that to a native shikari, who wants meat, all heads are big heads. That part of the game is always for you to decide. There are dozens of methods advocated to help you to decide this important point. I am afraid I consider none of them practical—only experience. As long as you have made up your mind to go for big heads, and have had one or two attacks of "heartburn" from shooting a small one, all will be well. Only, learn your lesson with the common game first.

From my own experience, my first impression of the size of a head—at a reasonable range, say 300 yards—has always proved correct. The more I have looked at him and wavered the larger he has appeared. The promptings of blood lust. There has never been the slightest question when I have seen a really fine head—even if the species was almost new to me. I admit it may be from the study of heads in collections and not from happy instinct, nevertheless I feel there is a trifle of both.

In any case, you seldom want to shoot the first specimen you see, so there is time to study them.

It is admitted that it is easier to stalk mountain game from above, but this cannot be a general rule. It must depend on the wind and opportunity. Nubian Ibex, for example, are often spotted on the skyline and stalked from below. Abyssinia Ibex (Walia) are unique and fully described in their own chapter.

Barbary Sheep lie very close in hollows amid the sandy and rocky hills, and spooring up and close spotting are often necessary.

Each man has his own method. I prefer one shikari and one tiffin coolie. The smaller the party the less the visibility. But this means you always have a spare man in case of an accident, to stay by you if your shikari wants to go wide afield spotting, to help carry your trophy as well as the lunch, to send to camp for help, and as a third pair of eyes for spying.

The shikari, for choice, ought to be a local man, and the tiffin coolie a tried retainer of your own caravan. This supplies a man who understands you and a link for the language difficulty.

Here is a rough outline of a hunt.

You have reached your first shooting camp.

You have picked up a local shikari or brought him with you. On the march be always on the quest for likely men, and engage several to try them out. Never keep a man of whom you are doubtful if he can be replaced. You will recognize the real gem at once.

The first evening you discuss and choose your hunting ground for the morrow and spy out likely feeding grounds from camp. You should not be more than a mile or two away from likely ground, low down, of course, camped on wood and water. In Abyssinia you may be above your quarry, but that is exceptional.

Next day you go out at dawn and make for some likely vantage point

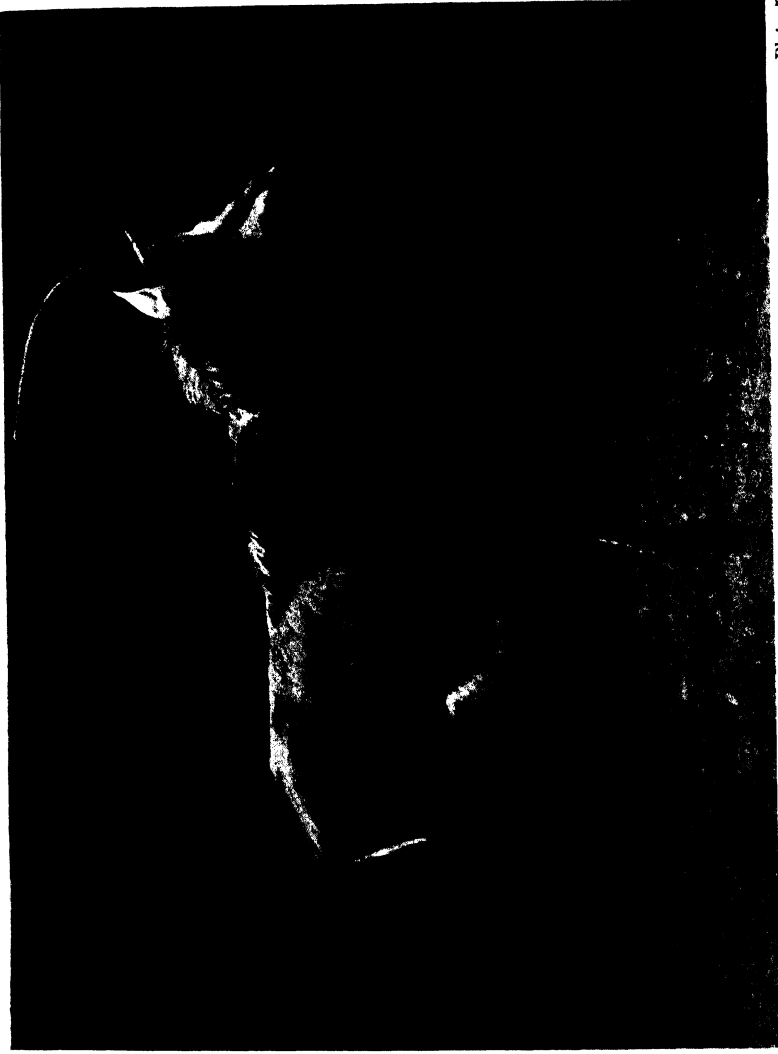


Plate 5

VITAL SHOTS ON SOFT SKINNED GAME

A YOUNG SABLE BULL. THE TWO COMMON SHOTS, NECK AND SHOULDER, AS ROUGHLY INDICATED.

on the heights. Don't hurry—make good all dead ground before moving each step—beware of skylines. Your shikari leads the way and should prove his worth within the first hour.

Even if you see nothing, or a herd of females at most, that first day, you will get the lie of the land and be able to plot out a new ascent and vantage point for the morrow.

Although you may leave the general plan to your shikari, don't overlook details yourself. Do plenty of close spying with glasses yourself, in case your new shikari is untrustworthy. Examine all pools of water and grassy ledges for tracks and droppings. Keep an eye open for old skulls and horns in nullah beds, which may help you to decide if heads run big or not. If game is common, don't always expect to find big rams with the herds. More often than not they are away by themselves in ones, twos or more, save in the rutting season.

Study the country. Many are the times that my shikari has tried to put me off likely-looking, out-of-the-way nullahs and corners on the excuse that the going is too bad and difficult for me. It is generally laziness or fear of responsibility on his part, and those very inaccessible nooks are often the pet sanctuaries of good heads. Your own instinct will point the way and there are few places that are really inaccessible somehow. That is where the true hunt begins. *Vide* Blaine's six weeks' search for some way to get down the Bwahit precipices for Walia Ibex, in the Abyssinian chapter. When he did find it he had found the real heart of the narrow shooting ground.

Which story points to patience also, a virtue I do not possess, and therefore go lacking several wonderful heads I might have had. One may learn in a lifetime and there may be hunting grounds in Elysium.

By noon it will be too late to spy in earnest. The game will be lying down. So lie up yourself, brew your tea, rest and think. If you lack food for thought on the mountain tops, if you feel weary and bored, best give up gun hunting and stick to the horses.

When the sun turns downward you must be moving for camp. Mountain game will be on the move, too, and generally descending in search of grazing. Below the skyline and in shadow, animals are difficult to spot. But halt frequently and listen for dislodged falling stones. Mountain game are particularly careless about this, which not only offers you a guide to their whereabouts, but makes them less wary of such noises when you are stalking them.

Africa is a poor mountain game country when compared with Asia and India, but its three trophies, Abyssinian and Nubian Ibex and Barbary Sheep, are all such sporting beasts, and so difficult to reach, that they come high in the list of prizes.

(2) *The Plains.*

I like this hunting least of all, unless it be in the true deserts. Yet the plains include such quarry as Elephant, Rhino, Buffalo and Lion, besides the common varieties. But I look on the hunting of dangerous game as a thing apart, which must be dealt with separately.

Hunting in the plains covers a little bit of everything—spying, spooring and "still" hunting. To the beginner it may at first seem the most attractive, because he sees more game. He must leave camp prepared

to meet anything, big and small, dangerous and non-dangerous. Roughly speaking, he does not know what he is going to shoot. If he has not shot before, he wants a specimen or two of each species. He may see ten to fifteen varieties of game that day, and they are all new to him.

His best plan would be to spend the first few days merely studying the game, learning each species by sight and studying their habits; seeing how close up he can stalk them and judging the size of heads. Of course, he must shoot something—it is human nature and meat is required in the camp. But let it be as little as possible and with those first few heads try and learn, yourself, the job of skinning and curing and don't let your men hallal or cut the throat too high up. The longer the neck skin of your trophy the better.

In hunting in the plains it is often very hot and you will probably be back in camp most days for a midday rest, but always go out prepared for the day with water and food.

In this type of hunting there is so much to say and to learn that I shall say nothing; it is far better for each individual to go and learn by himself. Most of the game is fairly common and mistakes are not irretrievable.

Desert shooting is a different thing. After the mountains I prefer it to any. There is a greater feeling of freedom and having the world to yourself. You are almost certainly after one or two definite beasts, and game life is rare.

It is all spooring and spying work and distances are long. In one way it is different from all modern hunting in that probably you leave camp on camel or pony back, and may actually make your first spy and approach stalk from the saddle.

Good guides are essential, as you may wander miles from camp and probably there is no water except there.

You will nearly always be away from camp all day.

Desert game is always very wary and in this case the close stalk is the most vital. There is seldom much or any cover. You must make use of sandhills and dunes, a shield of desert grass carried with you as you stalk, and creeping up yard by yard when the quarry's head is down grazing.

It is often possible to drive right up to such game in a motor car, or even to drive them down. It has been done. It is not often talked about, lest somebody shoots the offender on sight. I'm sure no jury would convict. I've seen Arabs do it in Syria. We can't blame them so much as the civilization which brings the car.

(3) *Jungle or Heavy Forest Hunting*

This almost certainly means a hunt after one definite quarry, such as Bongo or Nyala. Other game does occur, of course, but they are generally a side show and not wanted, as one dares not risk the sound of a shot. A Forest Hog might tempt one when in pursuit of a Bongo, owing to their extreme rarity, but nothing else. Buffalo and Elephant are common in the Aberdares, but nothing but a nuisance to the Bongo hunter.

The Zululand forest and its fringes contains other game than Nyala. The rare White Rhino (strictly preserved), good common Waterbuck heads and possibly record heads of common Reedbuck, but nothing else must count until the real quarry, the Nyala, has been bagged.



Plates 6—9

Top Left. SABLE ANTELOPE.
Top Right. GIANT ELAND.
Bottom Left. GIANT SABLE.
Bottom Right. ROAN ANTELOPE.

Therefore, possibly, African forest shooting is the most specialized of any.

Forest hunting has methods of its own and is perhaps the most patience-racking of all. It consists practically entirely of spooring up, and of spying open glades, at close range. It is not quite the same as "still" hunting as we know it in India.

Each chapter on Bongo, Nyala and Mountain Bushbuck will explain in detail what I am trying to convey. Kudu in many parts of Africa live in much the same kind of country, but it is generally more open bush, broken by small mound-like hills and ridges.

The method of forest hunting is eyes and ears at close range. You must be prepared to be out all day and on the move as long as you can. You will see very little and silence is essential. You will have no field of view, in fact you can dispense with field-glasses. You may seldom be able to see ten yards in front of you, save in a rare glade.

As usual, two men, a shikari and a tiffin coolie, are the best number, and the shikari must be a first-class tracker and a local man. In fact, I consider that the perfect shikari is more important for jungle hunting than in any other field and especially in Bongo forest.

Slowness of movement, quietness and alertness are the watchwords and you must be ready to shoot on sight.

The forest is full of a multitude of game tracks and paths, linking up glade and forest pool. The ground is generally soft and moist underfoot, and a thousand twigs and creepers make the going slow and difficult.

The light is bad and unexpectedly jumped game melts away like a shadow or bounds off with a crash, instantly submerged in the silence of the forest.

To spoor and watch at the same time is almost impossible. Yours must be the eyes to watch, while your shikari spoors up in front of you. Even then he will see more game than you do, being trained to the work, but if you can only pick up at once what he points out—maybe a motionless animal blended in the shadows at five yards—you will do well.

Your chief difficulty will be to pick out a bull from a cow; when the light is dim, horns are hidden in the bush, and not a moment is to be lost. Bongo cows carry thin, small horns and are lighter in colour than the bulls. Both Nyala and Kudu cows are almost invariably hornless.

I have found that all dense forest animals are apt to double on their tracks, whether wounded or not, and thus to lie in wait—off the jungle path—to see what is following them or blundering up on their spoor. Bongo, whether accidentally or not I don't know, once took to a river bed and wandered up it, feet under water, some distance before emerging, thus nearly throwing us off its fresh spoor. Mountain Bushbuck often made a habit of lying doggo in heavy tree heath scrub, and hoping that its pursuers will blunder by, unseeing. These are some of the commoner tricks of the game, but good forest shikar work is so skilful that one never ceases to learn. Perhaps the unerring way in which your shikari will lead you straight back to camp through dense bush, when the day is done, is not the least of his skill.

Dangerous Game

- (1) Thin skinned: Lion and Leopard.

(2) Thick skinned: Elephant, Rhino and Buffalo.

The following points on heavy and dangerous game were collected after consulting the opinion of several experienced sportsmen. They may voice more the ideas of general hunters and collectors rather than the highly specialized knowledge of Elephant and Lion hunters. For that reason they may be more practical to the beginner, who still desires to learn his A B C.

The differences between hunting dangerous and non-dangerous game. For dangerous game:

- (1) You are carrying a heavy rifle.
- (2) You must get as near as you possibly can, say 20 to 30 yards against 100 yards and don't fire if you can't.
- (3) Dangerous game is generally common. That is, as compared with rare animals, such as Bongo, Giant Eland, Nyala, etc.
- (4) The trouble begins when your quarry is only wounded.
- (5) There is very little opportunity for spying work.
- (6) Felines are nearly always met by chance.
- (7) Lions, as often as not, must be shot on the move.
- (8) Elephant shooting is a sport or science of its own.

As a general rule a sportsman in Africa will be out for either (a) a general shoot, or (b) the hunting of a speciality, be it Elephant, a rare beast, or a monster head of a species.

Although it may sound the same thing, the methods are actually entirely different. If you are out for a general shoot, your inquiries will be naturally for the best game country generally, where there is a fair chance of seeing Elephant, Buffalo, and Lion. Where the game is, there the felines will be too, and it were best to leave it to chance to bring the encounter. Aids may be employed which will be referred to later.

Buffalo, if they are there, should not be hard to locate and are not apt, as a rule, to be frightened out of the neighbourhood by the presence of man or a random shot. They have their local haunts.

The same applies to Rhino, which should be treated as a side show, and are apt to become a ridiculous, and sometimes troublesome, nuisance.

Elephant, on the contrary, are sensitive to invasion, and the hunter's first objective, before disturbing the jungle, should be to see if they are in his neighbourhood.

So, from each new camp, on a general hunt, the sportsman has a working scheme. Nose round first for signs of Elephant, spoor of Buffalo and Rhino, tracks of Lion and recent kills, and incidentally examine all herds of common game seen for good heads. This does not mean that if chance offers an easy opportunity at some rare or badly wanted quarry, the shot should not be taken. Take it. Luck does not often offer twice.

Otherwise don't be in a hurry to shoot anything. Take a day or two for reconnaissance. Game for the larder can be shot on the march. One shot in haste may mean a disturbed area and only a poor head as a result. Better leave a camp without a single shot than shoot a head you are ashamed of. Your satisfaction will come from the knowledge that you have thrown away no chances (by shooting) and have seen nothing fit to shoot. Three or four days in each camp should give you the "feel" of that district.

As a rough guide and eliminating lucky chances:

Elephant means picking up fresh spoor and being ready for a long follow up, varying from a few hours to a couple of days.

Buffalo means spooring up for an hour or two, generally following up from water.

Rhino as often as not are chance met and are only too promiscuous.

Hippo are hardly worth considering, and, of course, are only met by rivers or swamps.

Lion and Leopard are generally met by chance, and more than occasionally are practically shot from the tent door.

You will note that heavy game usually denotes spooring up and is mostly in bush country. You need a wary eye open for dodging Rhino in open bush; a Leopard lurking, catlike, anywhere; a Lion family in every grassy glade or in an unseen, unsuspected, cracklike ravine.

Hence, with heavy game, you are always on the alert for a sudden shot, be it self-defence or a fleeting chance. Your record head is at the back of your mind, but your hand may be forced. A Lion or a Leopard, a truculent Rhino, or a "jumped" herd of Buffalo, with an outstanding head among them. The thrill of bush shooting.

With non-dangerous game, on the contrary, especially when out for a rarity, the big head is everything, and the maxim should be: Never shoot in haste.

For advice on spooring, with facsimile illustrations of tracks and droppings of all the principal game animals, see *The Hunting and Spoor of Central African Game*, by Denis D. Lyell.

CHAPTER THREE

PRESERVING THE SKINS OF LARGE GAME FOR TRANSPORTATION

By CAPTAIN G. BLAINE, M.C.

THE skinning of large game requires less of skill than of care and diligence in the operation. The tools required are few and simple. Half a dozen skinning knives with blades of soft steel, costing a few shillings, a penknife of good quality for the more intricate work, and a few barborundum stones of not too coarse a grain for sharpening the knives are all that are necessary.

Of skinning knives, half should be provided with broad, rounded ends to the blades, and the remainder with pointed ends.

When going out hunting every man of the sportsman's retinue, which incidentally should not exceed three persons, should be provided with a knife and a sharpener between them.

Two necessary items of his own equipment will be a small note-book and yard measuring tape. An animal, after being shot, may be dragged to the nearest piece of even ground, to ensure its lying as nearly as possible on a plane surface. This preliminary move will assist greatly in the subsequent operation of skinning. Now make a note of the colour of the iris of the eye, and any other details that may be noticed at the time. If a sketch of any peculiar feature, such as the shape of the muzzle and nostrils, the eyes, or the ears can be added to illustrate the field notes, it will be of great assistance to the professional taxidermist in the subsequent work of setting up the trophy. Next proceed to take measurements.

The animal should be lying stretched prone on its side on as plane a surface as can be found in the vicinity. It is a good plan to raise the head two or three times from the ground, holding it by the ears or by the horns, and let it fall back again on to the ground, to ensure that it is not in a twisted or cramped position. Therein is the advantage of an even surface.

The measurements necessary for setting up a complete specimen are:

- (a) The length of the head and body.
- (b) The length of the tail.
- (c) The girth of the neck taken at three points.
- (d) The girth of the body measured behind the withers.
- (e) The girth at the loins in front of the hind-quarters and behind the stomach.
- (f) The shoulder height.
- (g) The girth of the forearm.
- (h) The girth of the thigh.

For the head and body measurements (a) an assistant should hold the end of the tape at the lower edge of the upper lip. The tape may then be run centrally up the facial profile, between the horns or ears, along the neck to the withers, and so follow the contours of the central line of the

back to the root of the tail, holding the tail meanwhile stretched perpendicularly, when its root can be exactly located. (b) Still holding the tail in this position, measure from its root to the end of the bone at its tip. (c) The neck girth should be taken at the junction of the head and neck, at the centre, and at the base from before the withers to the chest. Its length from between the horns or ears to the bend in front of the withers and from the throat angle to the chest are also useful measurements. (d) and (e) explain themselves. (f) For this measurement two straight rods or sticks are needed. Let one be held by an assistant, perpendicularly, touching the centre of the withers. Now take the foreleg that lies uppermost, holding it by the foot with the right hand, and pressing the knee backwards with the left, to straighten the leg. Draw the whole leg thus straightened into a vertical position in line with the centre of the withers, and press it slightly into the shoulder. Next, bending the fetlock into the position that it would naturally assume were the animal standing on the ground, plant the second perpendicular, touching the sole of the foot. The measurement between these perpendiculars gives the shoulder height.

This operation requires a little practice, and two assistants are advisable, one to hold each perpendicular, to allow the operator to stand back and check them with his eye, as a slight inaccuracy in the slant of the rods may easily cause an error of several inches in the measurement. (g) and (h) explain themselves.

The skin may now be removed from the carcass. Before explaining the process, I would like to draw particular attention to two points to be noted. Firstly, the knife edge must be kept as keen as possible. To keep it so the knife should be frequently sharpened during the operation. The skins of many large animals take the keen edge off a knife very rapidly, and good clean work cannot be expected with a blunt instrument. See that the men working with you keep their knives sharp also.

Secondly, the careful removal of the skin in the field, leaving no lumps or particles of flesh adhering to it, greatly facilitates its rapid and efficient final preparation when brought into camp.

To handle a knife effectively, the blade should be drawn with a light, sweeping motion of the hand and wrist, with its edge applied at a slight incline to the skin and not to the flesh surface, the other hand grasping the skin firmly, and drawing it back progressively as the knife separates it from the carcass. The most difficult part of the body to deal with is the region of the belly and the inside of the thighs, where the skin is thin and delicate. Over the belly will be found a thin, muscular layer of flesh, which adheres closely to the skin. Great caution must be employed in separating this layer, or gashes in the skin will occur. It will probably be found, when the whole skin has been removed, that little pieces as well as large areas of this muscular layer will still be adhering to it. Remove them on the spot with a very sharp knife. If left till the skin is brought into camp they will have hardened, and will be more troublesome to get rid of.

To Remove a Body-skin :

With the animal on its back and the legs held apart by assistants, commencing at the centre of the lower lip, cut just through the skin along the median line of the chest and belly to the end of the tail. Now make

lateral incisions at right angles to the median line; for the forelegs, through the centre of the armpit, down the inside of the forearm to the feet, the line of incision being inclined slantingly, across the back of the knees, and down the hollow of the inside of the cannon bones, thence round to the back of the fetlock, to finish at the hoofs. Similar cuts are made for the hindlegs through the groin, and across the inside of the hocks to the feet.

Now strip the skin from the carcass, commencing to work from the corner pieces between the legs, round the spine and along the tail. Strip the legs, and sever the bone at the wrist or fetlock joints, leaving the hoofs or paws to be dealt with in camp. Sever the head from the neck at its junction with the skull. During this process try to prevent blood from soiling the hair side of the skin. It is a good plan to collect a heap of dry earth, or sand if available, with which to soak up immediately any extraneous blood. If a pool forms, shift the whole animal on to a fresh piece of ground. Having freed the skin from the carcass, draw it away and spread it out, hair side downwards, upon a layer of cut grass, which will generally be found at hand. But small leafy branches of trees will answer the purpose equally well. Scrape off with a knife any blood that may still be on the skin, and remove all the little pieces of flesh still adhering to it. Spread the skin out to its full extent and fold the outer parts, including the legs and tail, inwards to the centre. Roll it up from the tail end forward till it rests on the head. In the case of a horned animal, it will lie between the horns. Tie it into a bundle with bush-rope, which your men will fashion on the spot from the bark of trees, and send it straight into camp.

To Remove a Head-skin Only :

With the animal lying on its side, as previously noted, trace lightly on the skin with a knife a curved line, commencing just in front of the crest of the withers, across the butt of the shoulder to the base of the chest between the forelegs. This insures a liberal allowance of neck skin. Now cut along the line so traced from withers to chest. Turn the animal completely over, and see that it is lying in exactly the same position relative to the head and neck as it was when lying on the other side. Unless this point is attended to, the skin will be more stretched on one side than on the other, and an uneven cut will result. Trace a similar line on the skin, and cut right through to the other side. Next prop the animal up into a sitting posture. This can be done by doubling up the knees under it, and pulling them outwards to make a firm support. Repeat the process with the hind legs. The animal will thus be posed in an upright position, resting firmly on its four doubled-up legs. An assistant should now hold it by the horns or ears, and strain the neck forwards, with the nose resting on the ground, and acting as a *point d'appui*. Get another assistant to pull on the end of the severed skin at the top of the neck. Cut through the skin down the median line of the neck as far as the centre of the cranium. No farther. The assistant should shift his hold on the skin, which he should strain back with both hands, on either side of the knife, at every few inches. Otherwise it will wrinkle, and an uneven, jagged line will result.

As the incision advances, the skin may be stripped downwards along

the neck on either side, until the throat is reached. Now stand the head on its face, and, pulling the neck-skin over the head, cut down through the larynx and muscles of the neck at the base of the skull to its junction with the first vertebra, and sever the head from the neck. In dealing with a maned animal, the incision should be made half an inch from the mane on one side. Fold the skin inwards and roll it up between the horns.

With a large animal it may be necessary to turn the body over again and cut downwards through the top of the neck, feeling for the joint with the point of the knife, after cutting down to the bone all round. The head held by the horns may be given a sharp wrench, which will dislocate the joint. Any native knows how to perform this operation.

The head-skin may be removed from the head in camp. From the point at the centre of the cranium where the division of the skin along the top of the neck ended, make two incisions obliquely to a central point at the rear of the base of each horn. Using a penknife, separate the skin from the base of the horns, digging with the knife-point inwards to the horn core.

Separate the skin from the cheeks until the ears are reached, and cut these through close to the bone. This will leave a triangular tag of skin attached to the narrow strip between the horns. Draw this tag forwards between the horns, and skin downwards over the forehead to the eyes, being careful to keep the edge of the knife close to the bone. Cut in deeply round the eye-sockets, being careful not to tear any of the delicate membranes that surround the eyes. To be on the safe side the eyes may be entirely removed at this stage, to be severed from the adjoining tissues later. Having freed the eyes, skin down the frontals to the angles of the jaws. Now pass one hand upwards through the mouth and, using the fingers as feelers, cut downwards through the mass of tissue inside the mouth where it joins the gums; then cut upwards from the junction of lips and gums, inside the mouth, until the downward cut is reached. Pull the whole skin forwards over the nose, which now forms its only remaining point of attachment to the skull. Cut vertically downwards through the cartilage at the end of nasal bones, and so through the underside of the muzzle to the gums at their junction with the lips. The operation is now completed

In taking off the head-skin of a small antelope, such as an Oribi or Duiker, I have found a penknife more handy than a skinning knife.

The next process is to free the head-skin of all superfluous fat and flesh and to pare down the skin of the neck to a more or less uniform thickness, not exceeding one-third inch. Two or three natives may be set to do this somewhat laborious task. The head should be taken in hand by an experienced operator.

First skin out the ears almost to their tips, using both the fingers and the knife to separate the two layers of skin, turning them inside out as you proceed. Great care should be exercised in nearing the rim of the ears, as it is very easy to puncture the skin at this place. This can be avoided more by feel than by any other method. Experience only will show exactly where to stop. Remove the small muscles around the root of the ear, leaving the cartilaginous channel of the ear intact.

Next remove the eyes, and carefully trim off all fatty tissue, without

interfering with the eyelids, or the delicate membranes that fill the eye sockets.

There will be found in some Antelopes, notably in Hartebeestes and Duikers, a gland below the eyes which secretes a black, sticky fluid. Shave this gland down to remove the superfluous matter. Now with the knife cut midway between the inner mucous lining of the mouth and lips. This will leave two tongue-shaped flaps at each corner of the lips, which are covered with papillæ. Trim off the fatty tissues on the inside to a uniform thickness, but do not cut off the flaps themselves, as I have sometimes seen done. They are needed by the taxidermist. Similarly, pare away any superfluous tissue on the inside of the nostrils, leaving only such as will be penetrated by the preservative to be subsequently applied. The head-skin is now ready for the preservative.

I always use a mixture of salt and alum, in the proportion of two parts of salt to one of alum. This mixture may be slightly varied to suit climatic conditions, by increasing the amount of alum during a rainy season, or in a damp, hot climate. Wood ash from the camp fire may also be used on skins with advantage. It has the useful property of absorbing fat, as it contains potash, and it is useful as an adjunct to the salt and alum mixture, to rub into any fatty parts of the skin such as that underlying the mane. I also have by me a few cakes of arsenical soap with which I paint such parts as the nostrils, or around the eyes, as it may seem necessary, or any local parts of the skin which may not appear to be drying properly. Before applying the preservative, the skin may be washed in a bucket of water, and thoroughly wrung out afterwards. This is most effectively done by twisting it up at either end in opposite directions, when all water will be squeezed out of it. Now spread the skin, hair side downwards, on a layer of cut grass, and sprinkle it all over lightly with the alum and salt mixture.

The whole secret of this process is to use very little preservative, and plenty of elbow grease. This part of the work is too often neglected, it being considered sufficient to spread a liberal layer of the mixture on the skin and leave it to soak in. Skins so treated may be preserved, but they are not popular with the taxidermist at home, and sometimes they are ruined for any future attempt at setting up a trophy artistically. Hard rubbing and plenty of it is the best method. I often use smooth, round stones with which I scour the skin. Rather more of the mixture must be applied around the nose and eyes, where some fleshy tissue is of necessity left, and this can best be rubbed in by taking the skin between the palms of the hands and rubbing it together, in much the same way as a washer-woman rubs clothes.

The skin is now ready for drying. There is no harm in folding it up into a bundle for one night, especially if the night is cool, and leaving the preservative to soak in. But the following morning it should be opened out again and set to dry.

First puncture a row of holes along its posterior edge, and thread them with string. Next cut a straight stick about a foot longer at each end than the part taken up by the flatly stretched edge of the skin, and hang the skin upon it.

Fix the stick horizontally between two branches of some adjacent shady tree, and at a sufficient height from the ground, to ensure that dogs and other animals cannot reach it.

A tree should be chosen so situated that the skin may get the benefit of any breeze that may be stirring. Press a small bundle of dry grass, or of leaves, not too tightly, into the bag-shaped orifice formed by the face and mouth, and one or two light sticks across it inside, to keep it open, and leave it to dry.

It is needless to remark that, if rain falls, the skins should be dried under cover.

In the rains it may be necessary to build an open shed in which to dry your skins, or even to dry them over a fire. I would like to stress the point that skins should be dried in the shade. Some contain fat which melts when exposed to the sun, and decomposes, and this is a frequent cause of the hair slipping. Once this sets in, I am aware of no remedy to repair the damage, and a ruined skin is the result.

In a dry climate the skins of the smaller Antelopes will often dry in twenty-four hours, the larger skins in three days.

Before a skin has completely dried, and is still in a plastic condition, it should be taken down and folded into a portable shape. The ears, which were left inside out, should already have been turned back again into their natural state, as soon as their inner surfaces have slightly dried, as, if they have become at all stiff, they will be found very hard to manipulate.

A skin while it is drying should frequently be examined to make sure that there are no signs of decomposition on any part of its surface. The nose is the best instrument for the detection of doubtful patches, which can be dried with arsenical soap applied with a small brush, and this will check the rotting action if taken in time.

My method with a head is to make two parallel creases of the same width as the head longitudinally down the neck, and to fold these inwards so that one side lies over the other. The ends of the neck, where it widens at the shoulder, will be found overlapping the central folded portion, and should be folded again inwards, so as to form a compact parcel of even width throughout.

The creases can be made by standing on the folded skin, using one's feet to press out the line. It will do no harm to the skin.

Open the skin out again and replace it to complete the drying process. When dry take it down and fold it as described. The ears and tag of skin between the horns should be turned inwards so as to lie inside the bag formed by the skin of the face. In this position they will be protected from damage by friction when travelling. The outside strings at the corners, that tied the skin to the stretching-stick, will be found useful in tying around the end of the neck to keep it together. The parcel can be made still more compact by doubling it over at the centre.

The cleaning of the skull is a simple process, and any native can be set to do it.

I always leave a little meat at the angle of the upper and lower jaws which, when dried, holds them firmly together. The brain matter may be removed with boiling water, after decomposition. It is a good plan to paint the base of the horns with arsenical soap, which prevents them from rotting. Painting the whole skull very lightly with arsenical soap will also help to keep it free from smelling offensively.

Boiling the Head.—To remove the meat clean from the bone, is apt to render the skull brittle. It is advisable to protect the nasal bones, which are

easily broken. A valuable skull when dry, for better protection from breakage, may be sewn up in a piece of sacking.

A complete body-skin should be treated in much the same way as a head-skin, the bones being removed from the feet, leaving the hoofs only attached to the skin, in the case of the larger animals. In the smaller the last phalangeal bones may be left in the foot.

Plenty of the salt and alum mixture should be rammed into the hoof. In treating a paw, such as that of a Lion or Leopard, the pad should be split open centrally, and the bones removed in detail. The skin to be dried should be spread out on a thick layer or pad of grass, rather thicker at the centre than at the sides, stretched to its correct measurements, which ought already to have been taken before the animal was skinned, and pegged out on the ground with numerous small wooden pegs, in such a manner as to stretch the skin evenly, and leave no creases in it. The pegs should be inserted on opposite sides of the skin simultaneously. When dry it may be either folded or rolled up.

It is not to be supposed that skins, once they are dry, need no further attention. On the contrary they require almost daily supervision, or they will become infested with insects which destroy the hair. The worst and most universal offender is the Dermestes (or Bacon) Beetle. After invading the skin it lays its eggs, and the larva, which is hairy, and of oval shape, when hatched does the damage. It can be recognized as a small beetle, about one-third inch long, of a dingy black colour, with a whitish-grey abdomen. This insect is more prevalent in the rains than in the dry season, but it is to be reckoned with at all times and seasons.

The best way to stop its ravages is to sprinkle the skin with spirits of turpentine. If this is not available, paraffin will answer the purpose, but it must be applied more frequently, as the effect of it wears off more rapidly. Pay particular attention to all parts that are most inaccessible, such as round the ears and inside the face, the parts that are least exposed to light and air.

The exposure of dried skins to the sunlight hair-side uppermost has a good effect in keeping Dermestes away; the skin may also be frequently beaten with a stick to dislodge these pests, when present. It may be convenient for transport purposes to carry a number of skins in a sack. In this case they should be plentifully dressed with turpentine, but a frequent inspection is still necessary.

For export purposes it is customary to hand over the specimens of game animals collected during a shooting trip to the Agents of some Trading Firm to pack and send home. The cases in which they are packed should be lined with tin. Plenty of naphthaline may be sprinkled on each skin, and inserted into its folds, after dressing it with spirits of turpentine. A well-known Firm in Kenya Colony makes an excellent practice of soaking each specimen in an arsenic solution, which permanently destroys all insect life.

The skulls should be packed in separate cases from the skins.

An important point never to be omitted is the correct labelling of every specimen.

The sportsman must attend to this himself in camp, as soon as a skin is dry.

Each label should be in duplicate or triplicate according to the number

of parts of the specimen to be labelled. Write on the label the sex, the locality, the date, and the collector's name, and also the number of the specimen. Strong parchment or linen labels may be employed.

Number each item plainly with an indelible pencil and add your initials thereto. This precaution will serve as a check in the event of labels being lost in transit. Each specimen should also be entered in a note-book, in which also any interesting field notes may be jotted down.

I would now like to make note of a few odd details that have escaped previous reference.

In most tropical countries the sportsman is likely to find Mohammedans among his native retinue. It is a Mohammedan custom, strictly observed among the devout, if less strictly by those who only wish to appear devout in the eyes of their fellows, to "hallal" or cut the throat of an animal to be eaten, before life is extinct. The sportsman must expect a wild rush of these people upon the animal that he has shot, as soon as it is down, and the first man up will slit the throat from ear to ear, completely ruining the skin as a trophy. Once the race has started no amount of shouting will stop it, and the sportsman, even if he runs, cannot hope to get there first, and will be rewarded by the loss, not only of a possibly valuable trophy, but also of his dignity and his temper.

Firmly impress upon your followers, before leaving camp, that any movement on their part towards the quarry when it is down is strictly forbidden. If so regrettable an incident does unfortunately occur, energetic measures must be taken on the spot to prevent its ever happening again.

There is a method of taking off a head-skin which is not to be recommended. It consists of removing the neck-skin in the form of a sleeve, instead of opening it up with the knife along its upper surface. A skin so treated is more liable to become infested with *Dermestes*, which find the bag of the sleeve a place exactly to their liking in which to lay their eggs, and is also a crumpled, unsightly object when dry.

A specimen required for mounting as a stuffed animal should have the incision for the neck from the back of occiput to the withers, along the upper surface, and not below, as is the case when a body-skin only is required, the neck being removed from above.

All gashes made accidentally in a skin with the knife must at once be sewn up neatly with needle and thread, while the skin is still wet. There is, however, very slight excuse for holes in a skin, which are evidence of clumsy and careless workmanship.

May I conclude this rather tiresome subject with a few suggestions?

All things worth doing are worth doing well, therefore pay careful attention to details.

Imagine a young sportsman out on his first shooting trip. Is he interested in making a fine collection of the trophies he has gathered, or is he merely attracted by the novelty and excitement of the adventure?

If the former, let him spare no pains to preserve at least one perfectly prepared specimen of each animal that he collects. It is far better to send home a few perfect skins than a collection of badly preserved ones, which are not worth the cost of packing and transportation. Remember also that a specimen that has not been correctly labelled, and is therefore without data, is valueless from a scientific or collector's point of view.

In the case of a sportsman not wishing to be put to the trouble of making

a really good job of his skins, far better that he should keep the skulls only, which can be more or less left to look after themselves.

The attraction, however, of many hunting trophies, more particularly in the case of the African Antelopes, is enhanced by their head-skins, the colours and distributions of the markings of which are often both striking and varied.

A badly preserved head-skin, with the neck cut off too short, patches of slipped hair, or full of holes and gashes, cannot possibly be modelled by the taxidermist to form a clean and well-finished trophy, and is only fit to hang on a wall in some American bar. But there is one very sound reason for preserving at least one perfect specimen of each variety of game shot during a first trip. It may not be the last one. The sportsman may be inspired by a love of the life to return again and yet again, and the first trophies that he brought home and which he was merely interested in as souvenirs of a pleasant excursion, may in the future assume an added value, as they become part of a collection that he is now anxious to form. He will then surely regret, as I have done myself, the badly preserved and unsightly heads that form the nucleus of his collection. As his interest and knowledge increases, he will become more critical of any work that is not good.

May I finally suggest, that every sportsman who has leisure to make a hunting trip abroad, should endeavour to the best of his means and opportunity to bring home something of value to be added to our National Collection at South Kensington.

The British Museum contains the most valuable collections of large game in the world, in the quantity and variety of its material, and the numbers of its original types. But an enormous amount of this material is both scrappy and imperfect. There are skins without skulls, body-skins with the head and neck cut off, head-skins without skulls and so on; in fact, whole heaps of mutilated material. Even many of the commoner species are badly represented.

The museum has been largely dependent upon the generosity of travellers and sportsmen for the collection of much of the material that it contains.

Perfect specimens, consisting of complete skins with skulls, correctly labelled, of such animals, for example, as the Hartebeestes, Gazelles, Duikers, etc., are always acceptable, many species being only poorly represented in the collection. There is also generally a deficiency of females, and a female shot accidentally, or for meat, may frequently be of greater value to the collection than a male. In view of the rapid diminution of the larger game animals all over the world, a plea in favour of presenting specimens to the National Collection, while there is yet time, is not unreasonable.

Every sportsman who takes this view will have the satisfaction of reflecting that, besides the pursuit of his own pleasure, he was able to make a contribution to the National Collection, nor will he feel regret at having taken life wantonly.

He owes this not only to himself, but also, in some measure, to the beautiful animals that he has gone forth to slay.

CHAPTER FOUR

RIFLES FOR BIG GAME

By MAJOR GERALD BURRARD, D.S.O.

IN any expedition after big game success or failure may easily depend on the weapon which is used. At the present time there are so many rifles from which the sportsman can make his choice that a beginner may quite possibly be bewildered. It can accordingly be stated at once that many of these weapons are so similar that for all practical purposes there is little to choose between them. All rifles can be divided into certain categories or classes, but before we begin to consider the properties possessed by the weapons of these various classes it will be as well first of all to come to a clear understanding as to what these classes are. Formerly sporting rifles were usually divided into three categories, namely: large bores, expresses, and miniature rifles. The origin of the word "express" was derived from an express train and merely signified a rifle which had an exceptionally high velocity, but since the days when this definition was coined advances in ballistics have been so enormous, that rifles which were formerly considered as "expresses" would now be regarded as developing very low velocities. Accordingly in 1919 I published suggestions for amended definitions and since then I have found no reason for making any alterations. These definitions of the various types of rifles are as follows:

Large Bore.—A rifle the calibre of which is greater than .600 inches.

Medium Bore.—A rifle the calibre of which is not greater than .600 inches nor less than .400 inches.

Small Bore.—A rifle the calibre of which is less than .400 inches.

Magnum Small Bore.—A small bore rifle which has a M.V. of 2500 f.s. or more.

H.V. Express, Cordite Express, Cordite Rifle or H.V. Rifle.—A medium or small bore rifle built specially to fire cordite or other nitro powder.

Express.—Any medium or small bore rifle built to fire black powder only, which has a M.V. greater than 1600 f.s. and a M.E. not less than 1500 foot pounds.

Miniature.—Any small bore rifle which has a M.E. of less than 1500 foot pounds.

Bore.—Large diameter rifles are not described by the diameter of their bore but by the word "bore" with a number prefixed, *e.g.*, 8-bore, 10-bore, etc. This number denotes the number of spherical balls of pure lead each exactly fitting the bore which would go to the pound.

N.B.—Large bore rifles are sometimes described as No. 8's or No. 10's instead of 8-bores or 10-bores.

Large bore weapons can now almost be regarded as weapons of the past. It is true that they are sometimes met with abroad, especially in India, and that they are extremely efficient and formidable weapons, but

their great weight, combined with the fact that they fire black powder, imposes such severe handicaps that I will not consider them further, especially as their work can be done more effectively by a modern medium bore cordite express.

Rifles of medium and small bore (including Magnum Small Bores) can be made in three different types: Double-barrelled; Single-barrelled single-loaders; and Single-barrelled magazines. Let us take these three types of action in turn.

DOUBLE-BARRELLED RIFLES

Double-barrelled rifles can be either hammerless or hammer. Hammer weapons are now not often seen, but they have certain advantages which should not be forgotten and which will be mentioned in due course. Hammerless weapons can be either side-lock or box-lock. Side-lock actions are again sub-divided into two types—bar-actions and back-actions. Incidentally it may be mentioned that hammer rifles are side-lock weapons and are made in these two types also. The most usual form of box-lock action is the well-known Anson & Deeley, but Messrs. Greener make two special types of box-lock actions which are certainly stronger than the ordinary Anson & Deeley.

The back-action side-lock is the strongest of all actions and for this reason is most suited to Magnum Small Bores which develop very high pressures.

On account of the high pressures which are always developed in rifles a top-grip, or top-extension, should always be fitted to double rifles. Ejectors are certainly an advantage, but they also constitute a possible source of weakness. However, the modern ejector mechanism is so reliable that I do not think that any possibility of failure need be seriously considered. But it is always a wise precaution to have a spare pair of extractors made for an ejector double rifle which can be carried in the case should one of the original extractors break.

Other special actions which deserve mention are the Lancaster Twelve-Twenty which is a type of back-action side-lock with great potential strength; and the Dixon round-action which is also an exceptionally strong action. The well-known Westley Richards box-lock guns with their hand detachable locks are also stronger than ordinary box-lock actions, but the strongest action of all is undoubtedly a back-action hammer rifle, because the bar of the action has not to be cut away to accommodate the limbs which are necessary in the working of hammerless locks.

Messrs. Holland & Holland reinforce the actions of their double rifles with extra metal at the angle. This is an excellent plan as it increases the strength at the most critical place.

All double rifles are expensive weapons, although prices naturally vary with the quality of the rifle and the reputation of the maker. Sportsmen often wonder why the double should be so much more expensive than the single. In the first place the locks and action are far more difficult to make and need more time and skill. But the greatest difficulty of all in the manufacture of double rifles is to regulate the two barrels so that they "shoot together," that is so that both barrels will place their shots in the same group. There is a very general belief that all that it is necessary to do is to set the two barrels parallel. As a matter of fact if this were done

the barrels would not shoot together at all, and in actual practice the barrels of all double rifles are set slightly converging, being closer together at the muzzle than at the breach. The reason for this is as follows:

When the right barrel is fired the recoil tends to throw the muzzle out to the right, since the axis of the barrel is situated to the right of the centre of gravity of the rifle; in the same way a shot from the left barrel tends to throw the muzzle out to the left. The result in the case of parallel barrels would be that the right barrel shot some distance to the right of the mark while the left would shoot a similar distance to the left of the same mark. This effect is eliminated by setting the barrels with the axes slightly converging. The actual degree of convergence varies with every different cartridge, and to a small extent with individual weapons firing the same cartridge. As a general rule it may be stated that the greater the velocity the more nearly the axes of the barrels approach to the parallel. In colloquial terms this can be explained by the fact that the faster the bullet travels the sooner it will leave the muzzle. Thus a bullet travelling up the barrel at a very high velocity will have left the rifle before the muzzle has moved its maximum distance to one side. A bullet travelling with a lower velocity, on the other hand, will stay in the bore for a longer time and consequently it will be more affected by this lateral movement.

The only known method of regulating a double rifle is by trial and error in actual firing at a mark. Such regulating takes a great deal of time and needs the highest skill. A really first-class regulator can make both barrels of a rifle shoot into a 3-inch group at 100 yards, and sometimes into a 2-inch group. It must, however, be remembered that the human element will always enter into tests for grouping, as were the double fired from a fixed rest it would not shoot in the same way as it would when fired from the shoulder.

And here I will mention a point which is most important in all doubles which are intended for use in hot climates, especially those of medium bore. As has already been explained the higher the velocity the less the necessary convergence of the axes of the barrels. Now all nitro powders are affected by temperature; the higher the temperature the more violent the combustion. When the combustion is more violent the velocity is increased and in such conditions the axes of the barrels of a rifle should approach the parallel more than they should when the velocity is not so great. Since it is obvious that the barrel cannot be re-regulated the effect is that instead of the right barrel shooting to the right and the left barrel to the left, that is, instead of the barrels shooting apart, they shoot across each other. This crossing of the shots is a common fault in hot climates and there is no known method by which it can be prevented. Special tropical charges have been tried but were not satisfactory and are not now used. The only plan to adopt is to bow to the inevitable, and to have the rifle so regulated in England as to allow for subsequent crossing in such hot climates, that is, so that the barrels shoot a little away from each other at 100 yards. The distance which should separate the groups from the two barrels must depend partly on the weight of the powder charge and partly on the type of powder used. As a general guide it can be taken that the barrels of a double cordite rifle of round about .470 bore should be made to shoot 4 to 6 inches apart at 100 yards in England. It will then be found that in a hot climate they will shoot so close together that it will

be found impossible to distinguish their groups under practical sporting conditions.

SINGLE-BARRELLED SINGLE-LOADING RIFLES

Rifles of this class are really only made with one type of action, the falling block. This is an extremely good action—strong, simple, certain in use, and reliable. It has, however, one weak spot, namely the extractor. The action does not tend itself to permit of much leverage being available in primary extraction, and in the modern small-bore cartridge the pressure is so high that the base of the case is frequently expanded to such an extent that it fits very tightly in the chamber of the rifle. The result is that the power of extraction offered by a falling block action is not always strong enough to dislodge the cartridge from the chamber. On this account the falling block action is now seldom used in modern magnum bores, and it has been almost entirely superseded by a bolt action of one sort or another. Second-hand falling block rifles are frequently picked up very cheap; and when such an opportunity occurs the sportsman should remember that the action is one of the best which has ever been devised provided it is not used with an abnormally high pressure cartridge.

SINGLE - BARRELLED MAGAZINE RIFLES

Magazine rifles are by far the most common, and they possess so many advantages that this is not surprising. A well-designed bolt action magazine has great strength, and is comparatively cheap; while the ability to re-load and fire several shots in succession is a great asset. All magazine actions are now made with a bolt which slides from rear to front. The most common is the Mauser, which is followed closely by the Mannlicher and Mannlicher-Schonauer. There are numerous modifications of the Mauser, for instance the American Springfield is based on the Mauser principle, while the British Enfield 1914 action is so nearly a Mauser that the difference need not be considered. Straight-pull actions, the best known of which is the Ross, are not often encountered in sporting rifles.

There is really little to choose between any of the magazine actions usually fitted to sporting rifles. The Mannlicher-Schonauer is probably the smoothest in working, but its special revolving magazine does not appear to lend itself to adaptation for some of the long cartridge cases which are an essential feature of Magnum Small Bores.

COMPARISON OF THE DIFFERENT TYPES OF ACTIONS

One of the chief essentials of any rifle is accuracy, and in this respect the single barrel will always be theoretically superior to the double. In practice, however, other factors have an important influence on the grouping capacities of a weapon, such as the way in which the barrel is attached to the action, and the way in which the action is bedded to the stock. But on the assumption that the weapons are of best quality, it is admittedly doubtful whether the double can ever quite give the same degree of accuracy at extreme sporting ranges—that is up to 300 yards and possibly over—as can be obtained with a fine shooting single. But there are exceptions to every rule and doubles vary in their grouping powers. Now and then one may run across a double small bore which will group just as closely as any single. It must, however, be admitted that such a weapon

is exceptional. On the other hand there is the human element, a point which is frequently forgotten, and there can be no doubt whatever that any good double will group far more closely up to ranges of 150 yards than the average sportsman is capable of shooting.

For close quarter work, that is up to 100 yards, a good double will group as closely as can ever be needed in practical sporting conditions; and on this account it may be stated quite definitely that up to 100 yards there is nothing to choose in accuracy between a double and a single, assuming good weapons are used in both cases. It is only at long sporting ranges that the superiority of the single becomes evident in practical sport.

After accuracy I think I am inclined to place balance as the next important quality in a sporting weapon and here there can be no two opinions: no single will ever balance as well as a double because there is not the same concentration of weight between the hands. For quick work, therefore, where balance helps one to swing and take snapshots the double is undoubtedly superior.

Weight is another very important factor, especially where the sportsman has to carry the rifle himself all day and every day in a hot sun. Here the double is at a disadvantage.

Then there is the question of reliability. Personally I do not think that any magazine can be regarded as being as reliable as a double. The bolt of the magazine is so exposed that grit, sand, twigs, etc., can—and sometimes do—get in the mechanism, causing a jam. Then if the bolt is not withdrawn fully a jam can easily occur, and in the excitement of the moment an inexperienced sportsman may easily fail to pull his bolt back sufficiently. The double is fool-proof. I am now considering only the firing of the second shot. The magazine will admittedly fire three or four shots more quickly than a double, but it is the *second* shot which counts, and for this the double must always be pre-eminent both in speed and certainty.

The mechanism of the double, however, is more delicate than that of the magazine; and an involuntary immersion in water, for instance, is likely to cause more permanent harm to the locks of a double than to a magazine action; for most sportsmen are able, and all should be able, to strip the bolts of their magazines with ease, but there are few who are competent to strip a double. It is, however, only fair and truthful to state that good quality doubles are so reliable that failures due to the mechanism going wrong are so rare that they need hardly be considered. And finally there is one point which is frequently forgotten and which personally I have always regarded as most important, that is the question of silence. The second shot from a double can be fired in absolute silence, and without making a movement. How often has one seen an animal which has been missed startled by the sound of the first shot but quite unable to locate the noise of the report. The snick of a magazine, however, immediately gives one's position away, but with a double the second shot can be fired without a movement and in silence. In the case of non-dangerous game one is thus given a sighting shot, and in the case of dangerous game one may probably keep one's position hidden and so gain time for the steady second shot. But in open country, where shots are taken at fairly long ranges, the importance of this point is not so great as in jungle shooting.

CARTRIDGES

A rifle cartridge consists of the case, the powder, and the bullet. Included in the case is the cap, with which the sportsman need not really concern himself. Rifle powders comprise Black Powder, Nitro-Cellulose Powders, and Nitro-Glycerine Powders. Black Powder with its accompanying smoke is now seldom encountered. It has, however, one great advantage over the nitro propellants in that it is entirely unaffected by changes in temperature. This means, for example, that a double regulated for Black Powder cartridges will not have its shooting affected by any climatic changes. At the same time Black Powder cartridges are now so comparatively rare that they scarcely need consideration.

Nitro-Cellulose powders are, on the whole, better than Nitro-Glycerine powders, although the latter are usually more powerful. Nitro-Cellulose powders are not so sensitive to changes in temperature as Nitro-Glycerine, the most notable example of which is cordite; and they are less severe on a rifle barrel, as the temperature of the gases resulting from combustion is appreciably lower than that of the gases of Nitro-Glycerine powders. At the present time the great majority of sporting rifle cartridges are loaded with some Nitro-Cellulose powder. Certain cartridges are loaded with cordite in spite of its additional disadvantages. The reason is that these cartridges were introduced before the advent of reliable Nitro-Cellulose powders, for it is only in comparatively recent years that Nitro-Cellulose powders have been made sufficiently stable so that they can be stored for considerable periods in tropical countries. A cartridge which was originally designed for cordite cannot be loaded with Nitro-Cellulose powder because there is not room in the case to load a sufficient amount of the latter powder to develop the ballistics which should be developed. This means that were the cartridges loaded with Nitro-Cellulose powder they would not give satisfactory results in rifles which had been sighted with cordite. And in view of the great number of rifles which are already in use in all parts of the world it would be unfair to change the propellant in a cartridge which would necessitate the rifles being re-sighted to suit the new cartridges, a procedure which would be impossible in many instances. Consequently it should be realized that it is only cartridges which were designed before the Great War (1914-1918) which are loaded with cordite and that in the cases of these cartridges the change is not practical politics.

Bullets for nitro-rifles consist of lead encased in jackets or envelopes of some harder metal. Formerly nickel alone was used but this was found to lack strength when the modern magazine type of small bore was introduced, and now the envelope usually consists of steel plated with nickel. The disadvantage of nickel is that particles of the metal adhere to the barrel during the bullet's passage up the bore. This deposit of what is known as "metallic fouling" can be a very serious drawback, especially in very small bores, as when pronounced it may cause considerable inaccuracy. In the most recent type of bullet the nickel plating of the envelope is replaced by a metal which is known in England as "Nobeloy" and in America as "Lubaloy," both of which are similar to gilding metal, which is an alloy of 89 per cent. copper and 11 per cent. zinc. The substitution of this gilding metal for nickel completely overcomes the difficulty of metallic fouling.

Sporting bullets normally have flat bases and noses which are pointed to varying degrees. The most recent development in military bullets is a tapered base as well. Such a bullet is known as the stream-lined and the longitudinal section is very similar to the horizontal section of a boat. The advantages of a stream-lined bullet over the ordinary flat-based one lies in its greater capacity for overcoming air resistances, which gives it a much flatter trajectory at longer ranges; high striking velocity at long range; and greatly increased ranging power. The stream-lined bullet, however, can offer no advantages in sporting rifles and since most extravagant claims are sometimes made for sporting stream-lined bullets it may be as well to consider facts.

There are two distinct kinds of resistance to a bullet's motion when travelling through the air, namely, a resistance at the head, and a suction at the tail. The former increases very rapidly as the velocity is increased, but once the space or low pressure at the tail (which causes the suction) has become a vacuum, this suction cannot increase any further, because a vacuum is the limit of low density which it is possible to obtain.

In actual sport ranges greater than 300 yards need not be considered, but at these very short distances the velocity of a modern bullet is so high that the resistance at the head of the bullet is terrific, while the suction at the tail cannot increase beyond a certain point. So it will be clear that at short ranges the suction at the tail is a very small proportion of the total resistance and so its reduction by means of a stream-lined base will have little effect on this total resistance.

Extreme accuracy, however, is essential. And since it is easier to make a square-based bullet shoot more accurately than a stream-lined one, the very slight advantage which the latter type of bullet would give at short ranges is more than counterbalanced by the certainty of greater regularity in shooting of the former.

At long ranges, however, when the velocity has fallen considerably, the resistance at the head has also fallen, while the suction at the tail remains the same. In these circumstances the suction at the tail constitutes a large proportion of the total resistance to movement, and so its reduction by means of a stream-lined base reduces the total resistance very considerably, with the result that the bullet retains its velocity better and so has a flatter trajectory and a greater striking velocity. In sport these conditions do not prevail owing to the short ranges at which shots are taken.

BALLISTICS

There are three different Ballistic Elements in a rifle: Pressure, Velocity, and Recoil. All are equally important, but from the point of view of the practical big game shot, the only one of these elements which deserves serious attention is Velocity. So I will deal with the other two elements as briefly as possible.

The Pressure generated in a rifle is due to the combustion of the powder which liberates gases with great rapidity and at very high temperatures. These hot gases begin to expand immediately they are generated, and this sudden and rapid expansion of the powder gases results in great force or pressure. Something has to give way, for the pressure developed by any propellant fired and confined in its own volume is greater than any firearm can withstand. This something is the bullet, as everything else is held too

firmly in position. Once the bullet does begin to move, the pressure which has been developed pushes it along the bore and out of the muzzle with great force, thus imparting to it what is known as Muzzle Velocity, or the velocity with which the bullet leaves the muzzle of the barrel.

In all nitro-rifles the pressures developed are very high in comparison with shotguns. For example a pressure of $2\frac{1}{4}$ tons is normal for an ordinary 12-bore shotgun, while the pressure of a Magnum Small Bore may be anything from 18 to 22 tons, and sometimes even more. Pressure is one of the greatest difficulties which the gunmaker has to overcome, as he must design his breech action so as to be able to withstand it. In doubles especially the difficulty is great because this type of action is not naturally so strong as a falling block or a bolt action. Incidentally this is one of the reasons why doubles must always be such expensive weapons. As far as the sportsman is concerned he can assume that any sporting rifle which he buys is sufficiently strong to withstand the maximum pressure which can normally be generated by suitable cartridges. If a choice between two rifles has to be made, however, it is always better, other things being equal, to select the one which develops the lower chamber pressure.

There can be no doubt whatever about the existence of Recoil, both because it can be felt and because it is a direct consequence of the Laws of Motion. On the combustion of the powder charge contained in the cartridge which lies in the chamber of the rifle gases are liberated which expand with great violence *in every direction*. The walls of the chamber and the barrel are made sufficiently strong to withstand this violence and consequently the full force of the expanding gases is exerted along the line of the bore both forwards *and backwards*. The backward force is of exactly the same degree of strength as the forward force, and it is this backward force which causes recoil or "kick." The backward momentum of the rifle when it recoils must always be exactly equal to the forward momentum of the bullet and powder gases when they leave the muzzle. In sporting rifles this question of recoil is not of great moment on account of the comparatively few shots which are fired at a time. In shotguns, where several hundred shots may be fired in rapid succession, the question of recoil can become of paramount importance, but this does not apply to rifles. Accordingly, all that the big game shot need realize is that in any rifle the backward force which causes recoil is constant provided the same cartridges are used; and that the lighter the weapon the more pronounced the "kick," because the force can push back a light rifle with greater violence than it can a heavier one. And here it may be mentioned that in the case of the large calibres of medium bores the weight of the rifle *must* be up to a certain limit or the recoil will become entirely excessive even when only one or two shots are fired. Consequently in such rifles a certain weight is essential whether the rifle is double or single. It is a mistake to assume that a .577 cordite express, for example, can be made very light as a single. If this were done the recoil would be altogether excessive. A certain weight is essential, and quite apart from the reasons of expense it is obviously better in every way to have a double rifle for any given weight than a single.

We can now turn our attention to Velocity, which is the most important of all the ballistic elements. There must be innumerable sportsmen who will always derive intense enjoyment from a study of gunmakers' catalogues.

In these catalogues the Muzzle Velocities of the various rifles are always quoted, but important though the muzzle velocity undoubtedly is, it is not so important as the actual velocity with which the bullet strikes an animal at a range of, say, 150 yards. When any projectile travels through the air it loses velocity all the time owing to the resistance of the air. But this loss in velocity is not the same for different bullets. In other words, some bullets possess a greater capacity for retaining their initial velocity. The factors which govern the capacity of any bullet for retaining its velocity are:

(1) *Weight*.—A cricket ball can be thrown further than a cork ball of exactly the same size. The strength of the thrower is the same with both balls yet the initial velocity is retained longer with the cricket ball simply because of its greater weight which enables it to overcome the resistance of the air more effectively.

(2) *Shape*.—A sharp-pointed bullet passes through the air much better than one which is blunt, just as the bows of a racing yacht cut through the water more easily than those of a barge.

(3) *Diameter*.—The smaller the area of the surface exposed to air resistance the less the effect of this resistance. In all bullets this area is circular and so the area exposed to air resistance is really dependent on the diameter of the bullet. It is for this reason that a long, thin bullet has a longer range than a shorter one of larger diameter although of the same weight, in exactly the same way that the narrow racing yacht moves through the water far more easily than one broader in the beam.

These three factors are of vital importance and entirely govern the design of all bullets. They cannot all three be combined in every case as weight must frequently be kept down. But there is ample scope for taking advantage of a bullet with a pointed head and of small diameter. The influence which these two factors have had on design of rifles and bullets can be seen in the gradual production of small bore rifles, both military and sporting. The original British Service breech-loading rifle was the Snider .577 bore. This was followed by the .450 Martini which was afterwards replaced by the .303. Similarly the nose of the bullet became sharper until it reached an absolute point as in the .303 Mark VII. From this it will be seen that a pointed bullet of small diameter will retain its initial velocity better than a blunt-nosed bullet of the same weight and of larger diameter. If both leave the muzzle with a velocity of say 2400 f.s. the striking velocity of the small diameter bullet may easily be 200 feet per second more at 300 yards than that of the large diameter bullet. So ballistically there can be no two opinions as to the advantage of the small bore.

In sporting rifles, however, the question of killing power is of vital importance and it will not be difficult to understand that a bullet which cuts its way easily through the air will also cut its way easily through the body of an animal. Now this is just what we want to avoid, because it is essential that the bullet should remain in the animal's body, otherwise a great deal of its power will be wasted. In order to overcome this difficulty bullets are made which expand on impact. At the present time there are innumerable types of expanding bullets all of which have certain advantages, but none of which is perfect. For it is clearly impossible to devise a bullet which will expand in such a manner as to retain sufficient penetra-

tion to pass through the vital organs of one kind of animal and which will also behave in exactly the same way when it strikes an animal of an appreciably greater size. Then the part of the body which is struck must always make a great difference to expansion: a bullet will expand very easily on a big bone but with difficulty if it passes between two ribs and misses any heavy bones during its passage in the body. Similarly an animal which offers an end-on target provides more resistance than the one which is fired at broadside-on. And another factor which affects expansion is the range at which an animal will be shot. The higher the striking velocity the more readily will the bullet set up, and so a bullet which may expand perfectly when it strikes an animal at a range of 200 yards will behave quite differently were it to strike an animal in exactly the same place and at exactly the same angle at ranges of 150 or 300 yards.

From this it will be realized that the most we can hope for is a compromise, and the best that can be done is to adopt a type of bullet which gives the best compromise for the particular kind of shooting which is most likely to be obtained.

Just as the muzzle velocities are invariably quoted in catalogues so are muzzle energies given as indicating power. There can be no doubt that the striking energy of a bullet at any range is a perfectly accurate mathematical measurement of its power. But this does not necessarily mean that it presents an accurate idea of its capabilities of killing. Innumerable formulæ have been put forward from time to time to indicate a rifle's killing power but none of them is of much value. The real truth is that it is impossible to express Life in mathematical terms of X, Y, and Z. There can be no doubt that energy is the nearest indication of a rifle's power that there is, but when different rifles are being considered the comparisons between the striking energies at any given range should not be pushed too far. For energy is dependent on two factors: the weight of the bullet and its striking velocity. For close-quarter work I personally regard the weight of the bullet as the more important of the two, and am sure that no greater mistake can be made than to rely too much on theoretical mathematical energies. Were I asked my opinion as to which of two rifles would be the most effective weapon when their striking energies at any given range were identical, I would not hesitate to declare in favour of the one in which the energy was made up of a combination of a heavy bullet and moderate velocity as against the one in which the energy was made up of a light bullet and a high velocity.

At medium and long ranges, however, a high striking velocity is undoubtedly a great advantage; and it is this fact which makes the modern magnum small bore such a wonderfully efficient killing weapon. Once an actual striking velocity of from 2300 to 2400 f.s. is exceeded the killing effect seems to increase out of all proportion to any increase in bullet energy, even when there is no change in the weight of the bullet. But it must be remembered that such high striking velocities can only be obtained with muzzle velocities of over 2700 f.s.; and that such muzzle velocities are only possible when comparatively light bullets are used. So although the killing effect due to the enhanced velocity of the Magnum Small Bore may be, and is, astounding in the case of medium-sized soft-skinned game shot at long ranges, it must be remembered that light bullets cannot be relied upon against heavy dangerous game, as they are

liable to break up too quickly after impact. Consequently for close quarter work against heavy game I would always prefer bullet weight to velocity.

SIGHTING & TRAJECTORIES

The chief merit of a high velocity is that it results in a flat trajectory, for the advantages of a flat trajectory are so great as hardly to need emphasizing. In the days of black powder various allowances had to be made according to whether the animal was 80, 100, or 120 yards distant. At the present time with the majority of Magnum Small Bores little allowance, if any, need be made for any range up to 200 yards, and in the case of many up to 250 or 300 yards. It is this increase of the range at which no allowance has to be made for bullet drop which is the greatest advance of recent years. Further, a rifle should be so sighted as to obtain the maximum advantage possible from the velocity which it develops. This means that the sights of a rifle should be set for as long a range as possible, provided that the trajectory is nowhere higher than from 2 to 2½ inches above the line of sight at any intermediate distance. In order that the reader may have some idea of typical range tables of different rifles I am giving in the following table the trajectories of four different classes of weapons. Since all sporting rifles are invariably tested at a range of 100 yards I have given the correct sighting for this range in each case.

TYPICAL TRAJECTORIES

N.B.—A rifle is said to be “sighted for” a particular range when the sights are so set that the second intersection of the trajectory and line of sight occurs at this range. In every case the rise and fall of the trajectory above and below the line of sight is given in inches. The plus sign indicates a rise, and the minus sign a drop.

(1) Rifles which should be sighted for 150 yards. Medium bore H.V. rifles such as .470, .400, etc.

Range in yards	100	150	200	250	300
Rise or Drop of bullet in inches	+2.2	+0	-5.0	-13.0	-25

(2) Rifles which should be sighted for 150 yards. Small bore H.V. rifles which develop a M.V. of from 2200 to 2400 f.s.

Range in yards	100	150	200	250	300
Rise or Drop of bullet in inches	+1.7	+0	-4	-10	-20

(3) Rifles which should be sighted for 175 yards. Magnum small bore H.V. rifles which develop a M.V. of from 2500 to 2700 f.s.

Range in yards	100	175	200	250	300
Rise or Drop of bullet in inches	+2	+0	-1.7	7	15

(4) Rifles which should be sighted for 200 yards. Magnum Small Bore H.V. rifles which develop a M.V. of from 2800 to 3000 f.s.

Range in yards	100	200	250	300
Rise or Drop of bullet in inches	+2	+0	-3.5	-8

We cannot leave this question of sighting and trajectories without considering the very important problem known as “Flip.”

When a rifle fires the weapon moves as a whole about the point of the stock, where the recoil is taken, and gives a backward jump, because the centre of the barrel is invariably *above* the centre of gravity of the weapon. In effect the recoil throws the muzzle up. At the same time the barrel

selection of the most suitable rifle. The choice of the weapon must always depend first, on the type of quarry which is expected, and secondly on the type of country in which the hunt is to be conducted.

Big game animals can be placed in two general classes: dangerous and non-dangerous. The dangerous game can again be subdivided into two classes: thick-skinned animals such as Elephant, Rhinoceros, Buffalo, Indian Gaur, and Tsine; and thin-skinned, which includes Lion, Tiger, Panther, and Bear. Non-dangerous game are all thin-skinned animals, so as far as the big game shot is concerned we have these three classifications for animals: dangerous thick-skinned, dangerous thin-skinned, and non-dangerous thin-skinned. I am inclined, however, to place Elephant in a class by themselves for reasons which will be seen later, and if this is done our four classes become as follows:

- (1) Elephant.
- (2) Dangerous thick-skinned: Rhinoceros, Buffalo, Gaur (or Bison), Tsine.
- (3) Dangerous thin-skinned: Lion, Tiger, Panther, Bear.
- (4) Non-dangerous thin-skinned.

These classes are of extreme importance because the various types require different bullets. But before we can go any further we must also consider the types of country in which these animals are found.

Big game country may be classified as follows:

- (1) Absolutely open country entirely devoid of cover such as the slopes above the tree line on mountains, table-lands, plateaus, open plains and desert.

- (2) Scattered scrub jungle interspersed with open spaces.

- (3) Dense forest or jungle.

In the first type of country long shots, that is long shots from the sporting point of view, must be the rule rather than the exception, and the usual range will be anything from 150 to 300 yards, and sometimes possibly even more. Except in very exceptional cases, however, I would always place 300 yards as the normal limit at which sporting shots should be taken. The game usually found in such country belongs to the fourth class, that is non-dangerous thin-skinned, and consequently great weight of metal is not of primary importance. In this form of shooting the chief difficulty to be overcome is judging distances, and for this reason a flat trajectory is a desideratum in any suitable rifle. On this account the choice must always fall on a Magnum Small Bore, and the flatter the trajectory the better. As has already been seen a flat trajectory naturally demands a very high muzzle velocity, and for this reason a rifle developing a M.V. of over 2800 f.s. should always be selected. It is, however, a mistake to sacrifice bullet weight wholly to velocity, as a very light bullet breaks up all too easily when it strikes a bone, and I would regard 140 grains as the absolute minimum limit below which it is not safe to go. In offering this suggestion I am not forgetful of some of the latest developments in rifles in which a 100-grain bullet is propelled with a colossal velocity. There must, however, always be a price to be paid for this velocity and I think that it is safer to decide in favour of a bullet of 140 grains or over and a velocity of from 2800 to 3100 f.s. Such a combination will provide a trajectory which hugs the line of sight so closely that the bullet is nowhere above or below it for more than $2\frac{1}{2}$ to 3 inches up to a

range of 250 yards, and even at 300 yards the drop is only from $7\frac{1}{2}$ to 9 inches. Such a trajectory is as flat as anyone can want, and it is provided by a weapon which is handy to use and efficient against game.

Contrary to general opinion I am not a great believer in an extremely light weight for a rifle for this class of shooting. Sudden chances at game at close quarters are not worth considering here, and one's glasses should never leave one's person. And even when you are actually doing your stalk it is often better not to carry your rifle yourself but to hand it over to your shikari. He being a hillman and well accustomed to carrying loads will convey it over bad ground more safely than 99 out of 100 white men. When you are within 10 yards or so of the spot from which you intend to get your shot you can then take your rifle yourself and creep on ahead. It should be remembered that much of this form of shooting is carried on at high elevations at which the breath is tested severely, and personally I have always found it more easy to hold a comparatively heavy rifle steady, if one does happen to be somewhat out of breath, than if it is a featherweight arm which resolutely declines to settle down in one's hands. In countries where one has to carry one's rifle oneself this point does not arise, and when it does arise I am inclined to believe that a rifle of 8 to 9 pounds will be found more easy to shoot with than one which weighs 7 pounds or under. But naturally this aspect of the matter must depend largely on individual physique.

To sum up the most suitable rifle in this form of shooting is one which develops a muzzle velocity of from 2800 f.s. to 3100 f.s. and which carries a bullet of at least 140 grains.

In our second type of country, which I have described as scrub jungle, the majority of shots will probably be taken at ranges which lie between 100 and 200 yards. Further, the game animals will frequently be heavier and larger than those found in open country and they will quite often include dangerous game, both thin-skinned and thick-skinned. In this form of shooting one should never stir without a rifle in one's hand. Any moment may give its chance, so it is not sufficient to have a man carrying the rifle just behind one. Such men cannot always be depended on, and even if they can there may not be time to seize the proffered rifle before the chance of a lifetime is gone. Further, it must be remembered that the shooting is conducted under a tropical sun which beats down with a fierceness entirely unknown and not understood in temperate climates, so the first essential in the rifle is that it should be well within one's strength to carry all day and every day. Men vary in their physique, and on this account it is impossible to lay down any limit as to what any individual can carry. It must, however, be remembered that a gun which seems light and easy to handle in the gunmaker's shop may seem heavy and leaden when tired out after many hours of tramping in a tropical sun, and, for this reason it is always better to "under-gun" rather than to "over-gun" oneself, because the great majority of men will always shoot better with a rifle which is well within their strength *at the time when they want to use it*.

After the question of weight the next question is stopping power. Game may be both heavy and dangerous, and on this account plenty of weight in the bullet is essential. Here I regard 220, or, better still, 250 grains as the lightest weight which should be used, and the more the

increase over 300 grains the better from the point of view of killing power.

Since shots are very seldom taken at over 200 yards, a very high velocity is not necessary. In fact, so far from being unnecessary, I regard it as a mistake, because high velocities are only obtained at the expense of bullet weight. I have for years been inclined to believe that the whole tendency in recent development of sporting rifles was too great in the direction of velocity at the expense of bullet weight. And in this type of country I am sure that a velocity of from 2300 f.s. to 2500 f.s. is as high as is needed.

To sum up, in this type of shooting—which includes the greater part of African shooting—the most suitable rifle is a *light* weapon which the sportsman can carry all day and every day himself without undue fatigue; which carries a bullet of at least 220 to 250 grains (or, better still, 300 grains), and which develops a muzzle velocity of from 2300 to 2500 f.s.

We now come to the third type of country, namely, thick jungle. Here game is usually dangerous, and a human life may depend on getting in a second shot immediately and without movement or noise.

The hammerless ejector double rifle is the best and quickest to reload; next comes the hammerless non-ejector, and then the double hammer rifle; but I regard the double as a *sine qua non*. For use against really dangerous game a rifle must be extremely powerful, and power means weight. It is true that the rifle must always be carried in the hand, and the weight is consequently limited to a certain extent by the owner's strength. Nevertheless, facts must be faced, and I regard a heavy double rifle as an essential. And here again weight of bullet is more important than ever. Dangerous game must not only be given a mortal wound but must be knocked down flat, so to speak, so that even if the wound is not mortal, time is allowed for a second shot. This knocking down flat process is essential and can never be performed by a small-powered rifle with certainty. For this reason I am sure that a double medium-powered nitro rifle is the best, and a heavy weapon is better provided it is not beyond the owner's strength.

We now come to Elephant, which I have purposely placed in a category by itself. Although I am, and always have been, a firm believer in the shock delivered by a heavy bullet, I would be the last to deny that in the case of such huge animals shock is of little use without accuracy of aim. In the case of Elephant the first essential is penetration, as unless a vital organ is reached and penetrated, no serious harm will be done. These vital organs are comparatively small, and, for this reason, a rifle with which extremely accurate shooting can be made is of primary importance. It is very difficult, and even dangerous, to offer suggestions, but I am inclined to think that the rifle most suitable for the second class of shooting, that is, a light weapon which fires a bullet of about 250 grains with a muzzle velocity of about 2300 f.s., is the weapon with which the majority of men are most likely to be successful. But an Elephant can be such a serious antagonist that the selection of the weapon is really one which every sportsman must determine for himself. Some men feel more confident with a light and extremely accurate small bore, while others prefer the feeling of comfort derived from the handling of a heavy rifle. I am sure that the best course for the beginner to adopt is to follow his

own natural inclinations in whichever of these two directions they lead him, and after he has gained experience, he will be able to modify his feelings if necessary.

BULLETS

After the selection of the rifle the most important point to be considered is that of the bullets which are to be fired from it. All thick-skinned game require bullets which possess a great degree of penetration, and it is a moot point whether solid bullets are the better or whether those with a small amount exposed at the tip should be used. Personally, I would be in favour of solids and it is hardly necessary to say that for Elephant they are absolutely essential. For heavy, dangerous, thin-skinned game, such as Tiger and Lion, a solid bullet is of little use. Although such animals can quite easily be killed with this projectile, killing power, as I have already explained, is not the only necessity; an animal must be knocked down flat. This means that the whole of the energy of the bullet must be utilized to its full effect, or, in other words, that the bullet must so expand that it does not pass through the animal. In the case of medium-bore nitro rifles, there is little doubt that the soft-nosed split bullet is the best of all; and, in the case of small-bore rifles, it is always better to select a bullet with a comparatively small hollow in the front if choice is possible.

For the lighter varieties of non-dangerous, thin-skinned game the bullet must break up more readily, and consequently one with a larger hollow in the front is preferable. The varieties of expanding bullets are legion, and probably all have something in their favour, although none is perfect. This aspect of the case has already been stated, and so I will not repeat myself. Personally, however, I have always found that the copper-pointed type of bullet is extremely effective, although I have no doubt that some of the more modern prototypes are just as good and may possibly be better.

ACTIONS

So far I have made no mention of the best action to select. In these suggestions for the choice of a rifle I have purposely left this subject until now, first confining myself to the general type of weapon which is the most suitable for the different forms of shooting.

There will always be two classes of sportsmen: those who prefer doubles and those who prefer magazines. Personally I must confess that I do like the former, although I am fully alive to the disadvantages of extra weight and possibly slight loss in accuracy at extreme ranges. I am, however, a firm believer in the psychological aspect of the problem, and am convinced that in rifle-shooting, as in shotgun shooting, a man will always perform best with the type of weapon which he prefers, and in which he has most faith.

The only form of shooting in which I regard the double as really essential is, as I have already explained, the pursuit of dangerous game in thick jungle, when shots must frequently be taken at close quarters. In all other forms of shooting the point is really one which the individual can decide for himself. It must, however, be remembered that cheap double rifles are not reliable, as the barrels are certain not to shoot together; further, they are almost always unnecessarily heavy, and it is

best to have nothing to do with them. Because a man cannot afford a new, first-class double rifle is not a reason why he should think that a cheaper weapon is as good. It is always better to buy a second-hand rifle than to spend the same money on a cheap new one, and great bargains may be met with frequently abroad. A first-class weapon is always an asset. These remarks apply equally to magazine rifles, but these weapons are smaller and cheaper to make, and since the sighting of a single barrel is child's play to the adjustment of a double, these weapons cost very much less. In the case of all firearms, however, it is best to buy the very highest quality which you can possibly afford, and money so spent is never wasted.

SIGHTS

Having decided on the rifle, the next matter to consider is the sights. Rifle-sights are of three types: open sights, aperture sights, and telescope sights. In both the former sights the same form of foresight is used, and so I will discuss these first. The commonest pattern of foresight is the bead, and this is undoubtedly the best. I am sure that the bead should always be as fine as the user can see with ease. Where long shots are the rule, it is more important to have a fine bead than for close-quarter work, because a coarse bead will often cover the whole animal. In such cases it is extremely difficult to take accurate aim. For shooting at close quarters in dense jungle, the bead can be comparatively coarse, so as to be seen easily in the case of a hurried snapshot, but here again size must be governed by the shooter's eyesight. The bead should be tipped with platinum or silver rather than ivory, as this last cannot be fused on to the metal and is very liable to break off. An enamel bead can also be used, but it is doubtful if enamel makes such a strong and permanent tip as platinum or silver. It is absolutely essential that the bead should show quite clearly apart from the stem, as otherwise, when the blueing of the stem wears, it is difficult to see where the stem ends and the bead begins. In order to overcome this point the bead should be undercut, when a shadow is always thrown behind the bead which stands out quite clearly in the strongest glare.

The folding-moon night-sight is a useful addition for attaching to the foresight when shooting in a bad light, but do not forget to test the folding-moon sight at a target!

At least three or four spare beads should always be taken on every expedition, and it is as well to make quite sure that they really do fit the rifle and are of absolutely the same size and height.

Back-sights are, as has been explained, of two types—open and aperture. The best type of open sight is the V, and there should be one standard *with no leaves*. One seldom misses any animal at long range because nearly every one overestimates distance and leaves are a temptation, and, if used, usually end in a high miss. The best plan is to have one small standard and to aim higher at long range. Study the range table of your rifle and aim a little further up the beast's shoulder to allow for the bullet drop.

The standard V should be broad and shallow so as to allow clear aim and there should be no little nick in the centre which tends to blur. Personally I always like a fine platinum or silver line let in vertically down the centre of the standard. It should quite reach the top. This last point

is important as it prevents the line merging into the bead, but it must not be too broad or it may attract one's eye unduly.

On no account should the standard V be made sloping away from the breech as light is thus reflected into the eye, and in a strong glare it is impossible to see the back sight properly. A vertical standard is preferable, but the best plan of all is to have the standard slightly undercut and sloping towards the breech. No light can possibly be then reflected into the eye, and the difficulty of glare is overcome. If an aperture sight is used on the rifle, the standard V *must* be made so as to fold down.

A common form of aperture sight is the Lyman, and it is hard to beat. At the present time there are many different patterns and adaptations to the Lyman sight, all of which are excellent.

Telescope sights have improved enormously since the War. The two chief advantages of the telescope sight is that it brings sights and object into one optical plane, and so entirely eliminates the strain of focussing on sights and object; and also that they enable one to see much better in a dull light. The power should not be too high, a magnification of 2 to 2½ diameters being ample.

They are, however, somewhat delicate instruments and are sensitive to the effects of moisture and dust. In any case, a telescope sight is useless unless it is properly fitted to the rifle, and here there is frequently much room for improvement. The strain imposed on the fittings by the firing of a number of shots is severe, and unfortunately it is by no means uncommon to find that the mountings of a telescope sight have become loose. Any sort of play in the mountings is absolutely fatal. The whole object of a telescope sight is to provide greater precision in shooting, and unless it is perfectly rigidly attached to the rifle, its position may very easily vary in between shots. This would, of course, be quite fatal to accuracy. I do not think that all British rifle makers pay enough attention to the problems connected with the fitting of telescope sights, and I am sorry to say that I know of more than one type of fitting which is absolutely unreliable. In common justice, however, I must state that I have never seen a telescope-sight fitted by either Messrs. Holland or Rigby which has worked in any way loose.

But the question of an absolutely rigid fitting is by no means the only difficulty. When a telescope sight is fixed to a rifle, it must be adjusted both for elevation and direction by actual shooting at a target. The elevation is easily altered by moving the pointer or cross wires up or down inside the telescope itself. The setting for direction, however, has to be done outside the telescope itself, and it is in this work that so many rifle makers frequently go wrong.

The telescope is fixed to the barrel by two supports which are about six inches apart. The grips into which these supports fit are dovetailed into the rib of the barrel in exactly the same way as an ordinary V back-sight is dovetailed into the rib. This is a strong and simple plan, but it has one disadvantage in that the grips can only be moved for lateral adjustment by tapping them over just as a V backsight is adjusted for direction. It will be perfectly obvious that if a telescope sight is in position and the operator wishes to put on some deflection by tapping over one of these grips, something must give way, since the grips can only move parallel to one another. If the telescope was held absolutely rigidly in the first

instance (as it should be) and one of the grips is tapped over, the telescope itself *must* be bent in the operation. It has been pointed out to me by rifle makers that the amount a grip is tapped across is so slight that the sight is not bent. This statement is not accurate. If the sight was rigid in the first instance, it must be bent in the new position. It is true that the bending may be so slight that the eye cannot detect it, but it is there, and any sort of strain put on a delicate optical instrument like a telescope is very liable to result in bad after-effects.

It is perfectly true that some rifle makers have long realized this point, and take great pains only to move both grips together, but it is only possible to make very slight changes in deflection by this means, and I am afraid that the plan of tapping over the grips is the more common.

When the grips are in their final position they are pinned to the rib.

The Aldis telescope sight completely overcomes this difficulty in adjustment because in it there is a most satisfactory device for making alterations for direction inside the glass itself in addition to the ordinary facilities for altering elevation. This is a great advance in telescope-sight construction, and I am sure that by this means telescope sights can be fitted absolutely rigidly and satisfactorily. The only drawback is that this device renders the telescope less dust- and damp-proof than an ordinary sight.

The Americans have devoted a very great deal of attention to this problem of fitting telescope sights, and have evolved the "Noske" mounting, in which deflection can be given in the mounting itself by means of milled screw heads. This mounting was so highly praised by various American writers that I thought they had at last found perfection, but I was disappointed in the mounting when I saw and tested one.

In the first place it was heavy in use and decidedly clumsy. But the weakest point in the design was the system of stopping the recoil. The inertia of a telescope sight is fairly considerable, and when the rifle recoils the tendency is for the sight to be left behind, so to speak. In order to prevent this, some type of recoil stop is essential to keep the sight in position. In the "Noske" mounting the sight attachment slides on a dovetail which is fixed to the action. On recoil the sight and attachment would slide forward unless they were held in position. This is done by a comparatively light and thin screw which has a round milled head. Apart from the quite unavoidable projection made by this head the screw itself is not strong enough for the work, and, after fifty rounds, it had become badly burred. In course of time it would inevitably jam hopelessly.

Then the system of deflection was, in my opinion, quite unsuitable for sporting purposes, although it was undoubtedly most satisfactory for purely target work. Once a telescope sight, or any other sporting sight, is set it should not be capable of being moved too easily, or it will be certain to get into wrong adjustment just at the critical moment. Native gun-bearers frequently fiddle with screws, for instance.

There can be no denying that the general principles of the "Noske" mount are sound, but in its present form I regard it as unsuitable for practical sport. The Aldis telescope sight is far better in every way.

Recently, however, the B.S.A. have developed an entirely new system of mounting telescope sights which overcomes all these difficulties and which is superior to any fitting which I have seen.

As has already been stated, all telescope sights are liable to be affected by damp, and it is a good plan to varnish the sights all over with shellac, paying particular attention to all joints, screws, etc. If this is done at intervals, when the varnish begins to show signs of wear, the risk from damp will be very greatly reduced.

AIMING

The principles of aiming are, on the whole, too well understood to need comment. But there is one exception, and this is the elementary rule that the same amount of foresight must always be taken when aiming with a V backsight. It is common to hear a man say that he has to take a fine bead at such and such a distance and a full bead at another. People who adopt this form of shooting show that they have forgotten one of the fundamental principles of aiming, and do not know the real object of a bead foresight. The object of this is to make it easy for the shooter always to take exactly the same amount of foresight, and the whole of the bead and nothing but the bead must always be taken on every occasion.

The chief difficulty of aiming with a V backsight is to focus simultaneously the backsight (which is a few inches away from the eye), the foresight (which is a few feet away from the eye), and the object, which may be 200 yards distant. And one of the most common faults in the sighting of rifles is to place the backsight too near to the breech end of the barrels, as doing so imposes too much strain on the eye. The disadvantage of having the backsight some distance away from the breech is that the sight base, that is, the distance between the backsight and the foresight, is decreased, which tends to inaccuracy. But it is easier to aim correctly with two sights which can be seen clearly, although they may be somewhat close together than with a longer sight base when the backsight is a mere blur.

The aperture sight is far and away the best form of backsight there is, provided it is used under suitable conditions of sport. Many who do not understand the principle of the aperture sight think that it is slow. When the principle is correctly used, however, it is the quickest there is in existence. A common mistake is to use the aperture sight in conjunction with a V backsight. *All the advantages of the aperture sight are then lost.* The correct way to use the aperture sight is to use it only in conjunction with the foresight. Look through it, without thinking of or bothering about centring the foresight; place the foresight on what you want to hit, and press the trigger. At first it seems hard to believe that the foresight is in the centre of what appears to be an enormous aperture and, on this account, there is a tendency amongst gunmakers to make the aperture too small. In reality it is far more difficult to place the foresight out of centre than in the centre, as one instinctively looks through the centre of a small hole. Confidence in this instinct can soon be acquired by practice at a target. At first you try to look *at* the aperture sight instead of through it. You must try to forget that the aperture sight is there and only think of placing the bead on the object.

The size of the aperture for sport should be quite one-tenth inch in diameter, as a peep-hole of this size will let in more light and so enable

the object to be more clearly defined, while the field of view is greater—a big advantage in running shots.

Briefly it can be stated that the advantages of the aperture sight are:

- (1) Long sight base, which gives greater accuracy.
- (2) It is only necessary to think of the foresight, and so extreme quickness is obtained.
- (3) The difficulty of getting the backsight into focus is eliminated, and eye-strain is saved.

The disadvantages of the aperture sight are that it fails in a bad light and that it is liable to be bent or pushed down when forcing one's way through thick scrub jungle, or that the aperture itself may become partially filled up by dirt. Should this last occur, the simplest expedient is to blow through the aperture, when the obstacle will be removed in nine cases out of ten.

Personally I would always use an aperture sight in preference to any other, except in very dense jungle. With all forms of sight there are certain faults in aiming to which all beginners, and even some experienced shots, are distinctly prone. The first of these is the mistake of not keeping the sights vertical but of tilting the rifle over to the right or to the left. When this is done, the shot goes low to the right or low to the left as the case may be.

The second fault is the taking of too much foresight in quick snapshots, and consequently missing high. The only cure for this is practice, although a well-fitting rifle is a great help.

Incidentally, downhill shots frequently present similar difficulties, but one should always remember that there is a distinct tendency to miss high when firing downhill.

The third fault to which beginners are particularly prone is that of aiming at an animal as a whole instead of at one particular spot. If one wishes to shoot accurately, one must aim accurately, and one should therefore try to hit some particular spot.

There now only remains the question of night-sights. I have already mentioned the "folding-moon," but in a bad light even this cannot be seen. A common device is to use an electric torch clamped to the rifle. This is perfectly effective, but it must be remembered that the weight of the torch will change the flip of the barrel, and consequently it is essential that some shots should be taken at a target with the torch fixed in position in order to find what effect there is on sighting. This effect will probably be negligible at the very close range at which shots are taken in such circumstances, but the possibility of its existence should not be forgotten.

But by far the most efficient night-sight of all is a telescope-sight.

BUYING A RIFLE

There can be no better rule for buying a rifle than going to some first-class rifle maker, who has a reputation to maintain, and seeking his advice. But in any case no matter from whom or where the rifle is bought, *it is absolutely essential that one should test it oneself at a target.* This is especially applicable to double rifles, and in England such weapons should, as I have already explained, shoot somewhat apart, the distance at which the two barrels should shoot apart at 100 yards to vary with the weight of

the shot-charge. In the case of rifles of round about .470 bore I am inclined to think this distance should be 4 to 6 inches, but in any small-bore rifles which take a lighter charge of powder, 3 inches should be ample.

And it is always better to have any rifle, especially those which fire cordite, sighted to shoot low rather than high in England. The heat of the tropics will cause more violent combustion of the powder and make the rifle shoot higher. It is difficult to suggest any hard and fast amount by which the rifle should shoot low and the weight of the charge of powder must be a guide. For example, a .470 should, I think, be sighted to shoot about 3 inches below the point of aim at 100 yards, while a small-bore or Magnum Small Bore should give satisfactory results if it is sighted in England, so that the main group is obtained just under the point of aim.

In any case it is always essential to test the rifle again at a target when one has reached the game country in order to find out exactly how it is shooting. In the highlands of East Africa, for example, there is a common complaint of rifles shooting very high, and the usual explanation is altitude. This, as I have already explained, cannot possibly make the difference which is frequently found, and I have always believed that a more likely explanation is to be found in the vagaries of light. In the tropics, especially on open country, the air gets heated quickly, and layers of air of different densities lie close to the ground. In such circumstances light is refracted, and consequently one does not get a perfectly true idea of the position of the target. The only remedy is practice combined with experience.

CLEANING & CARE OF RIFLES

There are very few sportsmen who know how to clean a rifle properly. Yet the process is simple and takes little time, while its importance cannot be over estimated.

The most important point of all is to pour about half a pint of hot water through the barrel immediately after one has returned to camp, and then dry this out carefully with rags. If the water is very hot this drying process is very simple and quick. The object of this water treatment is to remove the deposit of potassium chloride invariably left in the breech end of the bore by the residue from the caps. Potassium chloride has a great affinity for water and clings to the walls of the bore with considerable tenacity. If it is not removed it attracts moisture from the air and rust sets in. It is, however, very easily removed by dissolving it in hot water poured down the barrel.

At the present time certain brands of ammunition are advertised as having "non-rusting" caps. In such caps the potassium chlorate is replaced by other explosive compounds. This question of the cap is entirely beyond the scope of the present chapter, and I will only state that hitherto no non-chlorate cap has been devised which is so stable and reliable as the chlorate cap. It is true that an efficient non-rusting cartridge has been produced for the .22 rifles, but in these rim-fire cartridges the priming to the base is much larger in proportion to the total weight of the powder charge than is the priming of a centre fire-cap to the weight of the propellant in the cartridge. Consequently, in modern rim-fire cartridges, it is possible to use comparatively less priming, because

there is so much more of the priming there. In the centre-fire cartridge extreme efficiency is of primary importance, and no cap composition hitherto discovered is as efficient as the chlorate cap. On this account the water treatment should never be omitted because it is really the most important part in the whole process of cleaning.

After the rifle has been thoroughly dried, all that is necessary is to swab the barrel out with some alkaline oil. The advantage of using an alkaline oil lies in the fact that steel will not rust in the presence of an alkaline. To my knowledge the only two alkaline oils in the market are B.S.A. "Kleenwell" and Young's 303, both of which are excellent.

If "non-fouling" bullets are used, that is, bullets which are jacketed with gilding metal or some similar alloy, no further cleaning is really necessary; but if ordinary nickel-jacketed bullets, or nickel-plated steel-jacketed bullets are in use, a certain amount of metal fouling is bound to set up. Consequently, it is always as well, after the rifle has been dried out clean after the water treatment, to scrub the bore with some abrasive paste spread on a flannel patch wrapped round the jag of the cleaning rod. The best of these abrasive pastes is B.S.A. Cunirid, but the well-known Motti is also excellent, although it is a somewhat more violent abrasive and consequently its continual use will enlarge the bore. Still more violent abrasives are Jeweller's Rouge and B.S.A. Polishing Paste. Both these pastes will remove the steel, and consequently should never be used by the ordinary sportsman. If Cunirid or Motti Paste are not available, powdered pumice makes a very good substitute; or, failing this, some ordinary metal polish such as Brasso or Soldier's Friend will do quite as well.

Whatever abrasive is used can be easily swabbed out with a well-oiled flannel patch.

It is absolutely essential to remove all the oil from the bore of the barrel as well as from the chambers before the rifle is fired, and the simplest way of doing this is with a flannel patch which has been dipped in petrol. Unless this oil is removed from inside the barrel the resulting pressure may be distinctly dangerous, while a shot from an oily barrel can seldom be relied upon. If these simple precautions in cleaning are fully carried out, the life of a sporting rifle is almost indefinite. It is true that cordite erodes the barrel more readily than nitro-cellulose powders, but even with cordite I would place the life of a sporting barrel at anything from three thousand to four thousand rounds; and it would take a long time to fire this number of shots in legitimate sport, even including practice and testing at a target.

There is one point in connection with the use of a rifle in tropical countries which is of great importance and not generally realized. This is the danger of carrying cartridges exposed to the direct rays of the sun. The sun's temperature can be terrific, and if the cartridges remain for hours exposed to this heat, the powder gets so heated that the most violent combustion takes place. When this occurs, the pressure developed is abnormally high, and although it may not be sufficiently high to strain the action it will certainly cause enhanced velocity, which will mean a variation in the flip of the barrel, which will, in turn, mean a miss. Consequently it is always better to keep the cartridges protected as far as is humanly possible from the direct rays of the sun, and every now

and then the cartridge which is already loaded in the chamber should be exchanged for another.

MINIATURE RIFLES & BALL & SHOTGUNS

Ball and shotguns of the Paradox and Explora type have certain great advantages in that they are light and handy to carry and fire a heavy bullet which deals a knock-down blow at close quarters. In recent years, however, they have been replaced to a large extent by ordinary shotguns firing lethal or contractile bullets, and there can be no doubt that such weapons are most extremely useful on occasions; for instance, when shooting from the back of an Elephant there are few better weapons than an ordinary shotgun.

Miniature rifles can be very useful for collecting small game for the pot. The .22 rim-fire cartridge is so accurate and so cheap that the choice will naturally fall on some make of rifle which takes it. Such weapons also have the great advantage of making very little noise and so not disturbing the surrounding country. The .22 pistol is an admirable weapon for those who can use it, as it is much more handy than a rifle. Incidentally, a shot-pistol in a .410 or 28-bore is also a very convenient "pot-filler," although such weapons make more noise than a .22.

The disadvantage of a .22 is that the bullet is too light to kill some of the larger birds outright—they fly some distance before dropping dead. For this reason I would always prefer a .295 or .300 rabbit-rifle to a .22.

CHAPTER FIVE

MEDICAL EQUIPMENT & TREATMENT

By LT.-COL. R. E. DRAKE-BROCKMAN, D.S.O., M.D.

SO many sportsmen take either too little or too much medical equipment on their hunting trips, that a few words on the subject may be desirable. As so many of the finest of our wild game animals are restricted to unhealthy regions, the sportsman must first be guided by his probable requirements in the region he intends to visit.

Dressings, for example, are absolutely essential in the tropics, where Lions, Leopards, Tigers, Rhinoceroses and other dangerous game has its habitat.

On the other hand, when in quest of Deer, Antelope, and Sheep, dressings will seldom be required.

The writer can recall many instances of sportsmen failing to carry the necessary antiseptics and dressings and thereby either endangering their lives or necessitating the amputation of a limb, owing to their oversight or negligence.

It must be borne in mind that a wound, however trifling, caused by one of the carnivores, is, in nine cases out of ten, septic in a few hours. In the tropics these wounds fester and the infection spreads at a truly alarming rate. Twenty-four hours is sufficient in some hot climates to set up putrefaction.

Now, as regards drugs, it is seldom that the previously healthy sportsman requires to carry more than half a dozen at the outside. First and foremost of these will be one or more purgatives. Secondly, quinine, to be taken as a prophylactic, when hunting in malarial countries, is absolutely essential. Thirdly, some drug to allay diarrhoea until the nearest doctor can be consulted.

In the writer's opinion the elaborate medical companions and cases of equipment put up by many firms are not only ornate and expensive, but of little use, as they usually carry a number of useless drugs and an insufficient quantity of dressings. The following antiseptics and dressings are considered the necessary minimum.

(1) Absorbent cotton wool, one or two pounds, according to the size of the caravan and the length of time to be occupied by the trip. The latter remark applies to the quantity of all the dressings.

(2) Double cyanide gauze, two 2-oz. packets.

(3) Open wove bandages, one dozen, $2\frac{1}{2}$ inches width.

N.B.— $2\frac{1}{2}$ inches is the most useful width, as they can be cut lengthwise for application to the hand or fingers.

(4) Absorbent lint, two 2-oz. packets.

(5) Small box of safety-pins.

(6) Adhesive plaster, 5 yards, 1-inch width.

Of antiseptics, the most portable is permanganate of potash, which

can be carried in crystals or tablets, and a solution made up fresh as required. The strength of the solution may be judged by the colour. It is well to remember that antiseptics, when used too strong, do more harm than good. Frequent washings of a wound with a dilute solution is what must be aimed at.

Secondly, a 4-oz. bottle of tincture of iodine for swabbing superficial cuts and abrasions. To insure against breakage, the glass bottle should be in a container of wood. Of instruments, a small metal syringe for deep wounds, a pair of dissecting forceps and scissors, is all that need be carried.

Having collected together all the drugs, dressings and instruments which he regards necessary, the sportsman should next select the case in which he intends to carry them. In the writer's opinion, there is nothing better than a small japanned steel deed-box. This is ant-proof and should be waterproof as well. It is advisable to have a stout strap round it lengthwise, so as to enable it to be carried about right side uppermost. Provided that it is fairly substantial, a box of this sort is always useful, will stand any amount of knocking about, and can be made use of, after the dressings have been spent, for carrying small specimens of various sorts. Such a case should only weigh a few pounds. Now as regards the drugs: first and foremost comes the choice of a purgative. To keep up the resistance of the body, so as to enable it to contend with the tropical complaints, it is essential for the liver to be acting. To activate a sluggish liver there is no better drug than calomel. A half or one-grain tablet taken at night will usually suffice. If the sportsman is attacked with malaria, he should first take one grain of calomel, which should be followed some hours later by quinine.

To keep fit, particularly in the tropics, the bowels must be kept regular and active. At the first sign of constipation, half a grain of calomel should be taken. There are numerous other suitable aperients under ordinary circumstances which, however, can be taken in preference. Here it is only intended to enumerate the drugs which, in the writer's opinion, should find a place in every medical equipment.

Of the numerous compounds of quinine, the bihydrochloride in five-grain tabloids or tablets will be found the most convenient. Quinine need not be taken until the malarial zone is entered, when it is advisable to start taking it as a prophylactic. For this purpose a five-grain tablet can be taken daily, preferably at sundown. Some prefer to take larger doses on two consecutive days each week. If the latter method is adopted, fifteen grains on the first day and ten grains on the following day should be taken. The writer prefers the first method.

In a highly malarious region it is necessary to keep quinine circulating in the blood all the time, and that is why the writer recommends the daily dose.

Quinine is fairly rapidly eliminated by the kidneys after ingestion. It makes its first appearance in the urine within half an hour after it has been taken.

If, notwithstanding your precautions or after failure to take your quinine, you develop an attack of malaria, you should straightway, after clearing your bowels, take ten grains every four hours during the day and continue this dose each day until you have got rid of the fever.

The dose can then be lessened gradually during the next week, until you get back to your prophylactic dose of five grains per diem.

The next drug that should be carried is Dover's powder. This drug will be found to be useful in all those mild diarrhoeas, with or without fever, which are sometimes encountered on shooting trips. It is, however, quite useless in dysentery. Should the latter occur in a caravan, the patient should at once be isolated from the others, and he should be conveyed as soon as possible to the nearest station where there is a doctor. Keeping a dysenteric patient with the rest of the caravan is asking for trouble. Every follower contracting diarrhoea should be kept apart from his companions until the true nature of the cause is apparent or has been ascertained.

In every case of diarrhoea a purgative should be given on two consecutive nights, as the cause is so frequently dietetic, and this will usually cure it. A patient with diarrhoea should be made to cover his stools with earth to prevent the flies from settling on them and becoming infected thereby.

If it is impossible to get the patient to a doctor, the camp should be moved every few days to a new site. It cannot be too strongly urged, in the interests of the patient as well as the rest of the caravan, that every effort should be made to get the patient away to a doctor for investigation and appropriate treatment in every case of persistent diarrhoea. The writer has known, in the past, when doctors were few and far between in tropical Africa, of caravans being decimated by so-called diarrhoea which was nothing less than one of the true dysenteries in its most virulent form. The dead and the dying had to be abandoned, together with their loads, where they fell by the wayside, in order to save the others by pushing on.

Mild diarrhoea, such as are due to dietetic errors, can be usually cured by clearing the intestine with a purgative and rest for a few days. If, however, this fails to allay the symptoms, it is probably due to one of the dysenteric germs, and then it can only be cured after the germ has been identified in a laboratory and the patient put on the appropriate treatment.

No other diseases are likely to attack or interfere with the sportsman or his caravan in the tropics except, possibly, spirillum fever. Spirillum, or tick, fever, also called relapsing fever, is found in the Somali country and similar dry regions in Africa. The parasite is conveyed to the blood of man by the bite of a particular tick which has a dull brown leathery body when full grown. The harm, however, is usually done by its progeny, which are flesh-coloured and about the size of a pin's head. The victim only really discovers their presence when his legs are covered with them and they have been biting him for some time and thereby setting up itching. Bathing the legs with as hot water as is bearable is the way to get rid of them.

The hard-bodied ticks so commonly found on game animals and on the long grass in the plains do not convey any parasite harmful to man, although they occasionally bite him. The soft, harmful ticks are invariably found in the soil under bushes and trees where domestic animals, particularly sheep and goats, are wont to congregate during the heat of the day. They are very common in the neighbourhood of the wells. The

fever is not nearly so incapacitating as malaria. Avoid camping or resting under trees adjacent to wells and water holes.

So far only three drugs have been mentioned, and, in the writer's opinion, it is unlikely that the average healthy sportsman, going for an ordinary hunting expedition, is likely to require any more.

I now come to the treatment of wounds which are always liable to occur in most caravans. They are generally of minor degree but may occasionally be serious.

All minor cuts and scratches, due to thorns and abrasions, need no more attention than painting or swabbing with a pledget of cotton wool soaked in tincture of iodine and then left exposed to the air. The pure desert atmosphere will soon heal a superficial wound in a healthy man. Deep scratches or bites caused by a Lion or Leopard are, however, another matter. The claws and teeth of the larger cats, owing to their partiality for dead game, which has more often than not undergone putrefaction before being devoured, are invariably infected. The smallest wound inflicted by a Lion or Leopard is practically certain to cause trouble, and the sooner such a wound is treated, and drastically treated, by repeated washings with an antiseptic, the less likely is the infection to spread. If the wound is left untreated for twenty-four to thirty-six hours, it is tolerably certain that an operation will have to be performed to ensure free drainage.

No wound, however slight, inflicted by a Lion or Leopard should ever be neglected. They are always serious.

It is not the strength of the solution but the thoroughness of the washing that counts. A deep wound must be kept open to ensure free drainage, and never be allowed to close up until all redness or other evidence of inflammation of the surrounding tissues has entirely disappeared. Deep wounds heal up from below by what is known as granulation tissue, and they can only heal satisfactorily while they remain open and clean. Scrupulous cleanliness is the only short cut to the healing of open wounds. So dress them frequently, according to the amount of discharge and never let the latter accumulate on the wound or allow it to spread by burrowing into the surrounding tissues, a process that will certainly take place unless you give it a free outlet. Never cover such a wound with lint. Only use antiseptic gauze over which a half-inch thickness of absorbent cotton wool is placed. Lint, after absorbing a small part of the discharge, sticks, dries and hardens, and then acts as a stopper to the pus obtaining a free outlet. Lint should only be applied to abrasions and superficial wounds when there is little or no discharge and when further contamination or injury is liable to occur if they are left exposed.

Note.—Further medical information, applying particularly to Uganda, will be found on page 272.

PART TWO

DANGEROUS GAME

CHAPTER ONE

GENERAL CONSIDERATIONS

By MAJOR H. C. MAYDON

IF in all hunting the all-important maxim is, "It is the first shot that counts," then, ten times more so, is this applicable to dangerous game.

So important indeed, that every old shikari will advise you to approach your quarry as closely as is humanly possible, even to the point-blank range.

Strange as it may sound, close proximity gives safety. For even the most dangerous game seldom charges on sight, and then never without a reason.

Out of scores of instances, I know of but one case personally when the quarry, a Malay Bison (*Seladang*), charged on sight. But it transpired that he was a solitary old bull, who had evidently just been turned out of the herd after a stiff fight. His horns and forehead were bruised and bleeding, and he was doubtless in a vile temper. When suddenly disturbed from sleep, he charged, fighting mad.

There have been other cases in which the game acted as if in offensive mood, but in each case it has been either a wild panic-stricken rush when surprised, or the cautious, snorting advance of curiosity, or a semi-charge, never pushed home.

Now it is just as easy to get hurt accidentally, as it were, as by a determined charge, so that it is necessary to approach all dangerous game with caution. But the real reason for approaching as closely as possible, and of being particularly careful over the first shot, is to avoid a wounded beast.

If due to carelessness, or lack of taking pains, it is a crime in any case, with dangerous or non-dangerous game; but with dangerous game the possibility of a mauling is added to the offence.

I consider that the danger chance from dangerous game, if unwounded, is about 1 per cent., but when wounded it leaps to 25 per cent. Most animals, if they are wounded or cornered, will show fight.

Nearly all so-called dangerous game are bush-loving animals, and even if located and shot in the open, will take to the bush when wounded.

Elephant and Buffalo are nearly always spooked up from their water-holes or grazing grounds, and will generally be overtaken in bush or thick

cover. Hence another reason to get up as close to them as possible. A twig will turn a bullet, or, equally, conceal a vital spot.

For Elephant, Buffalo, and possibly Rhino and Hippo, one may leave camp prepared. Fresh spoor has been found, and it is to be definitely a hunt for one of these beasts.

But for Lion or Leopard it is another story. The probability is that they are met with unexpectedly and by chance, and it is more than likely the hunter has only his small-bore rifle with him. Moreover, they are very often encountered almost face to face, and there is scant time to make a plan. This is the moment responsible for so many accidents. A hurried, excited shot leads to a bad one, the beast is wounded, and the fun commences.

What is the correct action then?

In cold blood one says, "Play canny and wait for a certain chance. It is better even to let the beast escape scathless, than to risk a chancy shot." But this won't carry much weight with the new hand, whose blood is certainly far from cold at that moment.

Well, if he must shoot, and granted that the beast is really close enough to make all manœuvring impossible, let him shoot and trust to luck.

But let him dwell on his aim that last fraction. Let him know what he is aiming at, be it neck, brain, or heart, and let him press the trigger with a squeeze and not a jerky pull.

Risks must be taken sometimes; we've all done it, and most of us have survived to tell the tale.

In case the beast is not killed stone dead, nor even "laid out," yet there is little danger for the next few moments. His first instinct will be to get away. Then, when you follow up, is the time to be wary. Most old shikaris agree that it is best to give him half an hour for his wounds to stiffen, or for a mortal wound to kill him, or for his desperate rage to cool. Appease your impatience by sending for your heavy rifle and shotgun, and by making a plan. Circumstances and your own local natives will suggest one.

If the beast falls to your first shot, make sure that he is dead, and even put in a careful vital shot, before you approach him.

If he reels and staggers and is seemingly anchored or simply waiting for trouble, don't move, but go on placing carefully aimed shots at vital spots. Don't forget that hasty, ill-aimed shots are practically useless, only adding to his nervous energy and his increasing rage.

It all sounds so simple, not worth discussing, but only experience can show how easy it is to "make a mess of a sitter," and even to endanger your own skin from neglect of the one and only maxim, "It is the first shot that counts."

After this brief preamble, let me step aside and introduce you to the opinions of better and more experienced exponents of dangerous game.

THIN-SKINNED DANGEROUS GAME

CHAPTER TWO

LION & LEOPARD

By DENIS D. LVELL

OF all the great game of Africa, the Lion holds the first place in the imagination of the average man embarking on his first hunting trip in that continent. A certain air of mystery and romance is associated with the hunting of a Lion, as distinct from any other African beast, and the tyro in hunting will not consider his ambition to have been completely satisfied without having included at least one of these great carnivora in his bag.

The pure luck of a chance encounter enters more into the killing of a Lion, or Leopard, than in the case of any other game animal. A man may spend years in a Lion country without so much as a glimpse of one. A novice may walk into one on his first excursion into the African veldt. Only in certain countries is it practicable to spoor Lions, the requirements being either sand or soft soil after heavy rain.

There are various ways of hunting Lions which may be classified as follows:

- (1) Spooring.
- (2) Riding them down on horseback.
- (3) Listening for their roaring or grunting in the early morning, and then searching the likely places in which the sound was heard.
- (4) Putting out "kills" in localities frequented by Lions.
- (5) Sitting up over a "kill" at night.
- (6) Hunting with dogs.

Of the above six methods the first three alone fulfil the traditions of legitimate sport. No. 2 is to be ruled out as being outside the scope of the average sportsman's resources, requiring a trained pony and a rideable country. This method of hunting Lions, as practised in Kenya Colony, is akin to pig-sticking, and is a subject for a quite separate article. No. 6 is not worth considering from the point of view of legitimate sport, but is useful as a very sure method of exterminating Lions with a minimum of risk to the hunter.

Lions.—The Lion is considered to be the most dangerous animal to tackle in Africa, for the following reasons:

- (1) It is difficult to get a clear shot on account of thick cover, and he can hide behind a tuft of grass or small bush.
- (2) He is quick in his movements when he wants to come into action.
- (3) After being hit he will likely charge if closely approached in thick cover.

(4) Wounds from him are always septic.
(5) More fatal accidents from Lion are on record than of any other animal.

(6) He has less fear of man than any other beast, and in the rainy season in wilder Africa he kills and eats many natives.

Because one Lion happens to behave like a cur, is no surety that the next one seen will be the same, for they differ as much in temperament as do human beings.

Small-bore rifles are quite efficient for killing them if a good type of expanding bullet be used. A projectile which does not break into chips is necessary. Perfect expansion means that about two-thirds of the bullet mushrooms in front, leaving the base intact. The "dum-dum" pattern is just right for Lion, and for all other soft-skinned game, such as Antelope, Pig, etc.

As to the Best Position for a Vital Shot.

When a Lion is half facing, the bullet should be put on the lower point of the shoulder. It will then smash the bone, pierce the heart or big arteries, and when it is fully expanded, tears through the opposite lung and stops inside. A bullet which gets right through an animal loses a certain amount of its striking energy. Therefore, solids are unsuitable for Lion.

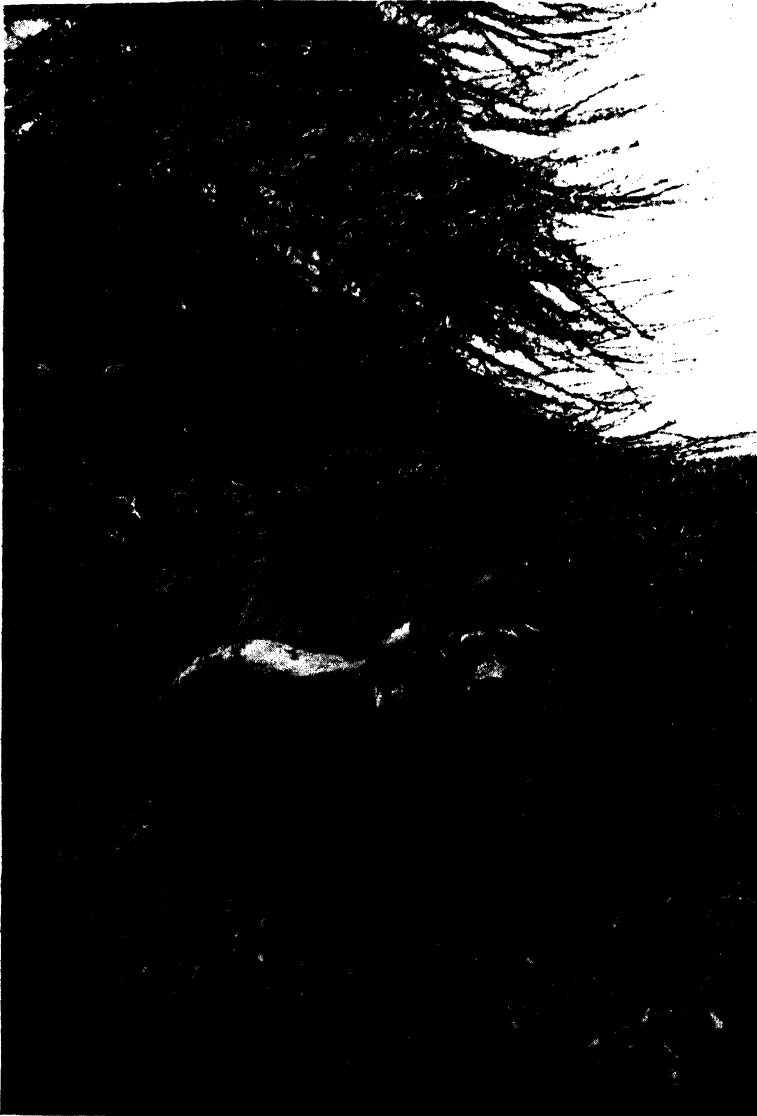
The next best shot is when the Lion is facing half away, when the lung is the mark, and the bullet goes on and smashes the further shoulder, having pierced the heart or arteries in its course.

When a Lion is full facing, low down in the chest is the spot for the heart. If it goes a little high the arteries, lung, and possibly spine may be struck.

If a Lion is on the point of charging he will often fling his tail stiffly in the air. Unlike a Leopard, which springs, the usual gait of a charging Lion is a low rush, when his chest will be covered with the swaying movement of his head. So a man standing up would have some difficulty in making sure of the heart shot. In such cases sitting is probably the best position, though it prevents a quick jink aside if the animal gets home! A Lion often grips his adversary by the leg, but will just as likely rear up and send him flying, or seize the nearest point, which is generally the left arm of the hunter.

In much-hunted country Lions are becoming warier, and in East Africa are nowadays much more silent than they used to be, which is a pity, for their nightly choric music is one of the grandest sounds in nature when heard at close quarters.

After wounding a Lion, as other dangerous game which goes off, it is wise to wait for a little before starting to follow him, as this gives the animal time to settle down and to feel the effect of the wound as it stiffens. This, of course, depends on the nature of the surroundings, for it is naturally safer to take greater risks in fairly open country than in thick jungle. By far the worst place to tackle a wounded lion is in a patch of heavy grass or reeds, where it is impossible to move quickly, besides being impossible to see him. Moreover, in long grass it is difficult to move the rifle barrel from one side to another, if necessary to swing it round. Therefore, in such cover, the wise plan is to keep the muzzle of the weapon up, so that it can be dropped through the gap necessary for a shot. A small point, but sometimes vital.



LION

Plate 10

A UNIQUE PHOTO OF A FINE MANED LION IN E. AFRICA.

So long as a Lion, after falling, shows sign of life, shoot at him, but do not pump shots anywhere and spoil the skin. Approach him from behind, and never do so without making sure the rifle is loaded and in the firing position, as several accidents have occurred from this cause. All double rifles should have their safety bolts made non-automatic—which means that after reloading the locks are ready to fire.

When one is following a wounded, dangerous animal into thick cover, it is best to go very slowly, and stop to listen constantly for any sound denoting its proximity. A useful plan is to get a native to carry a few stones, or lumps of earth, and heave them into a suspected quarter. Once with an angry Lion in Nyasaland, I got his exact position by doing this, for as soon as the clod landed, he dashed at the place, evidently thinking it was a human being close to him. This is better than firing a shot, which leaves one unloaded at perhaps a critical moment, or may drive the beast away.

I think most wounded game prefer to go up wind so as to scent danger ahead, but a Lion will just as likely travel down wind so as to get the smell and sound of his trackers coming behind. Although I believe that a Lion does use his scenting powers, I think he depends even more on his hearing, a trait highly developed in all bush and forest game, especially when they are being hunted. Man, when he is looking for an enemy, uses his eyes most, but when he knows that he is being hunted his ears become more acute, and it is the same with animals in this respect.

When following a wounded beast in thick cover the tracker should go first, with the hunter, rifle ready, just behind him. The spoorer should not talk, but signal with his hand, or gently pat his thigh as a sign. Even the snap of the fingers can be heard in the silent bush. On sighting the game, the tracker should immediately drop to the ground or kneel down.

Tracking a feline is the hardest task a spoorer can undertake, as the soft pads leave very little impression on anything but sand or wet mud. If a man can be found to do this well he can follow anything on four legs.

The great thing with Lion is not to fire until there is a good certainty of putting in a vital shot. The majority of accidents have been due to carelessness in shooting. The experienced man may take risks in this way because he knows better how to proceed afterwards, but the beginner, when he makes a mess of the first shot, will often make matters worse in the follow-up, by far the most dangerous part of the proceedings. There is little risk before the first shot is fired, so it is a mistake to fire until one is fairly certain that the shot will be a knock-out. Beginners should be warned that heavy shot from a scatter-gun should not be used at a greater range than ten paces or thereabouts, for it is quite unreliable as a stopper at anything much over that range.

Leopard.—This is one of the most difficult animals in Africa to get a shot at, as he is not only extremely cunning, but is very quiet in his movements. At night, especially in hilly country, his sawing grunts will often be heard, but, as with Lions, it is not easy to find Leopards by day, even if they are numerous in that locality.

He is a denizen of the plains, bush, and forest, and is probably better distributed throughout Africa than is any other animal. In Southern Africa, where all the game has been practically exterminated, except in a

few reserves and on private property, the Leopard still lingers in the hilly places, to take toll of domesticated stock and small dogs. In tropical Africa he will eat anything he can find and kill, from the young of Antelopes to Monkeys, Field Mice, and wild fruits.

Sitting up is the most likely plan to get a shot, but this is a poor form of sport, and the best way to get a chance at this wily creature is to try and find out his usual route from his daytime retreat, often a cave or the like, when he is on the prowl. There is no certainty that he will use the same track every evening, but wild game, like the indigenous humans in Africa, usually follow the path of least resistance, and by knowing where it is, one can often circumvent this beautifully marked cat.

The great advantage of sitting in some shady spot is that one can keep quiet, for there is no animal alive more suspicious of noise, as it puts him on the qui vive at once. Then, if he is visible, all one sees is a glint of yellow, the flick of his tail, and he is off for good like a flash of lightning. Leopards are wonderfully quick and agile, and many men who have shot several Lions have yet to shoot a Leopard.

The Leopard is so thin-bodied that the target is a poor one unless he is within 50 yards, and the hunter has a steady position. A small-bored rifle, such as a .256 or .275, is quite good enough for Leopard. It makes little difference what the rifle is if one knows its shooting and uses expanding soft-pointed bullets. The great thing is to hit him well forward, and the shots required for Lion are exactly right for Leopard. It is a mistake to fire at the head, as the bullet may glance off.

When hunting dangerous game it is wise to carry some permanganate of potassium crystals in a tube or an empty cartridge case. When using them crush the larger chips into a fine powder before putting them into the tooth hole or scratch. Both the teeth and claws of carnivora are poisonous, and the usual result of a mauling is death through septicæmia, so it is important to use some strong disinfectant. Iodine in a fluid state is as good, and so is carbolic oil, but permanganate is the easiest carried.

Nothing could be more effective for a charging Leopard than a shotgun loaded with S.S.G., which should stop any Leopard up to twelve paces away.

Leopards vary in size greatly, and the natives in Nyasaland said that the smaller hill variety were more inclined to be savage than those of the plains.

The killing of a Leopard is more a question of luck than of any other game animal, but when it is got by fair hunting it is one to be prized as a well-won trophy.

THIN-SKINNED DANGEROUS GAME (*Continued*)

CHAPTER THREE

LION & LEOPARD

By COLONEL STEVENSON HAMILTON

LION.—Fortunately for the inhabitants of the African continent, the Lion of uninstructed popular belief, that fearsome and half demmented animal, has no existence in fact. The Lion of reality is a lazy, very intelligent and, until annoyed, rather a good-natured, placid creature. He is seldom dangerous to man so long as an adequate supply of his natural food is available; indeed, preferring to give the dreaded human race and all its works as wide a berth as possible. It is only when driven by the starvation consequent upon the cessation of the necessary supply that isolated individuals become what are known as "man-eaters." In a well-stocked game country even old and feeble animals, unable any longer to hunt for themselves, are usually able to sustain life by finishing what their younger and stronger relatives have left over. It is man himself who usually is responsible for the disappearance of the game on which the Lion naturally exists, and thus drives him to live by "crime."

So far is the normal Lion from being aggressive towards man, that it is not uncommon to pass within a few yards of an individual concealed in the grass without his giving the smallest indication of his presence. So long as Lions think they are not seen they will, like other animals, depend on immobility for safety, and it is only when they realize or imagine that their presence has been detected that they will spring up and make off with rumbling growls of annoyance.

Actually, and if undertaken with some knowledge concerning the habits of and a proper respect for the defensive capabilities of the quarry, Lion hunting contains no special danger, though a little carelessness or ignorance may make it extremely risky.

The methods of hunting this splendid animal vary according to circumstances and the nature of the country.

Probably the most exciting and the most dangerous is that of riding the quarry on horseback to a standstill—without the aid of any dogs—springing off when he at last halts to fight, and getting in the shot before the almost inevitable charge occurs. This method presupposes an open country, such as the plains of East Africa, where—before the days of motor cars at least—it was fairly popular. It was thus that in 1911 Mr. George Grey met his death. The secret of success in this form of sport apparently lies in never "riding on the Lion's tail," but in keeping wide on one flank, so that the pony may be swung round without losing his stride, in case of an unexpected rush by the Lion.

Considerably behind this, from a sporting point of view, comes the

horseback pursuit with a pack of trained dogs, which bay the Lion and thus enable the hunter to get a standing shot at him. Provided the hunter is without the support of a companion, and that he dismounts so close to the Lion as to obviate the otherwise considerable risk of shooting one or more of the dogs, this method is often not without its special danger. For an angry Lion will frequently charge right through a pack of the largest dogs, scattering them right and left in his determination to get at his principal foe.

In close country the actual hunting must be done on foot, and since the greater part of present-day Lion country consists of forest of one type or another, it is this kind of hunting which will usually have to be undertaken. Incidentally it is by far the most interesting of all methods, and that which calls most on the qualities which go to make a good hunter.

There is a method of shooting Lions, it cannot be called hunting, which has often been pursued all over Africa by those who are for some reason unable or unwilling to follow their game by fair heel and toe. This is to shoot several Buck or Zebra, and then to leave the carcasses lying about in the hope that a Lion may come along in the night and be found there at daylight. Personally I think this is not one of the most desirable of methods, and should only be resorted to on emergency, or when it is essential to kill a particular Lion, or Lions; it comes under the same category as sitting up at night, except that in the latter case there is more risk from a possibly wounded animal lying in ambush in the morning. It is also wasteful as regards the game and, far from being usually successful, the bait generally attracts only Hyenas and Jackals. It is more sporting than setting a trap for Lion, but not much.

Chasing and shooting Lions from motor cars I naturally do not touch on, since no sportsman will desire to take part in this disgusting practice, which combines the maximum of comfort and safety with the minimum of effort and skill, and gives the quarry no chance at all either of escape or of defence.

Hunting the Lion on foot by tracking him, or otherwise pitting one's wits and those of one's attendants against his, is therefore what I shall endeavour to describe. The requisite adjuncts to success are a couple of good trackers, or a trained dog, which will follow, in leash, Lion spoor and nothing else. Such a dog is exceptional, indeed must be born and not made, and to the lucky possessor is worth its weight in gold. Good native trackers are nearly as hard to come by. It is easy enough to follow the prints of hoofed animals, but a soft-footed creature moving lightly over hard ground in dry weather is a very different matter. Moreover, some otherwise efficient trackers are not keen on following Lion, especially if they are ignorant of their employer's hunting qualifications, nor, indeed, can they be blamed.

If available, a pony is a great asset. One can ride out to the ground with the prospect of having something better than one's own legs to traverse the many weary miles which sometimes separate camp from the point where the day's hunt ends. And what this means can be appreciated only by those who have experienced what a long day of walking and tracking under the African sun implies.

Successful hunting in Africa or elsewhere, of whatever kind, requires some knowledge of the characteristics and habits of the particular kind

of animal which forms its object. And this is perhaps more true in the case of the Lion than of any other creature. Serious and premeditated Lion hunting has this in common with Elephant hunting, that the sportsman must devote himself for the time entirely to the business in hand, and disregard any other kind of game. Promiscuous shooting will quickly scare every Lion out of the district, and is the cause of these animals being so seldom encountered by ordinary hunting parties, even in areas where they may be comparatively numerous.

As regards the best rifle for this work, opinions differ. But since the Lion is a very intelligent animal, with a highly developed nervous system, he will collapse from a wound which might have little apparent initial effect upon one of the large Antelopes. My own experience, for what it may be worth, is in favour of a medium bore magazine rifle. I began my Lion hunting with a 500-577 D.B. Express, continued it with a .350 magazine, and finally settled down to a .303 of the old-fashioned military pattern, with ten cartridges to the magazine, using government ammunition with solid bullets, which I had slightly notched at the points with a small circular saw. I found a well-placed .303 bullet to be quite good enough for any Lion. And in the event of the first shot not being well placed, the best plan was to keep pumping in lead as fast as possible in order to keep him from getting out of sight if he made off, or to shake his nerve if he was inclined to show fight after having been hit. I have found that the solid bullet with a single narrow and shallow cut at the point gives a better result and breaks up less than any other form of expansive missile. At any rate, while using the above kind of rifle and form of expanding bullet, I have killed about a hundred and fifty Lions without ever having had anything in the nature of a contretemps. But every one to his taste. No doubt many sportsmen will feel more confident with a larger bore rifle in their hands. I certainly had excellent results with a .416 Rigby magazine which I used for a short time, as no Lion hit by it ever required a second shot. Of course a small bore cannot be trusted to stop a determined charge from close quarters, but then I very much doubt whether, except by the greatest luck, any rifle will do so if an uncrippled Lion really means business. Most of the stopped charges one hears about seem either to have been half-hearted affairs, or the beast was so badly hurt that he could only come comparatively slowly. Inexperienced people often think they are being charged when the Lion is really only blindly rushing to escape and comes more or less in their direction. But the Lion, if he really means to charge home from any distance under 50 yards, if only slightly wounded and if once allowed to get fairly in his stride, comes so fast, and presents so difficult a mark, that I don't believe anything except a charge of slugs down his throat at the last moment can be relied on to stop him. In this, as in so many other affairs of life, prevention is better than cure.

A Lion usually takes a little time observing his adversary before making up his mind to attack, and even when he has done so, for the first few paces at any rate, generally advances at a trot. This is the time to stop him, for on receiving a bullet, he will very often think better of it and swerve away, still more so, if not one, but a rain of bullets come his way. This is, of course, supposing the animal to be in the open or, at any rate, in view. If he has been wounded and has taken refuge in thick undergrowth, as so often happens, it is best to leave him alone for the time and to send home

for the dogs or, failing such aid, to devise some means of locating him. For no experienced hunter will blunder into thick covert in pursuit of a wounded Lion, still less of a wounded Lioness.

Not that it by any means follows that the beast will show fight, though it is about ten to one on a Lioness doing so. I recollect once having an old male Lion driven to me out of a small patch of covert in which he had taken refuge unwounded. He came out at a good fast gallop, and I got a running shot which hit him too far back. He immediately stopped and began looking round to try and locate me. But as I was partially sheltered by a small tree-trunk, and remained perfectly motionless, he was unable to do so, while for my part I was prevented from getting in another shot by the intervening scrub and branches which masked all vital spots. After a minute or so, he growled and bounded off into a deep thicket close by, after which he remained perfectly silent.

I then called my two trackers, and after a short consultation, one of them climbed a high rock near by, to endeavour to locate our quarry. Almost immediately he returned to say that the Lion had not remained in the thicket, but that he had seen him walking slowly away along the bank of the dry stream bed and about a quarter of a mile distant. We then, of course, at once took the spoor. Heavy blood tracks led us into the middle of the thicket, and when at its densest part, there came a growl and a crash almost, as it seemed, at our feet. The leading tracker was just in front of me, and fell back right on to the point of my rifle as I raised it. We were a helpless trio; but instead of using his advantage, the Lion crashed away in the opposite direction, and having sent for the dogs, we presently found him quite dead a little further on. We had actually got to within five yards of where he was lying before he rose and, had he chosen to attack, the bush was so thick that we could have done very little. The Lion seen making off was another male, very similar in appearance, which had been lying all the time in the thicket, and had moved quietly off when I fired at his mate. The mistake was a natural one, and it was only the accident of that particular animal not being a fighter, or perhaps feeling too sick, that saved us.

Another point in Lion hunting, which it is useful to remember, is that a wounded animal as a rule charges only as a last resort or when for some reason it feels it cannot otherwise escape. In fact, fear is the impelling force. Attack, in other words, seems the best method of defence. Therefore, so long as the stricken Lion feels confident that it is undetected by the hunter, it is likely to lie quiet and trust to concealment rather than take the risk of attacking its pursuer. A Lion has far greater intelligence and reasoning power than is sometimes credited to it. I once had an interesting experience of this desire of a wounded Lion to avoid trouble as long as possible.

A troop of Lions had killed two cows from a native village a few miles away from my camp, and all the next day was spent in tracking them unsuccessfully. As I felt it due to the natives to avenge what had happened, I arranged to sit up that night over the carcass of the cow which had been least eaten on the previous night, and which was about 50 yards away from that of the other, not much of the latter being left. There was nearly a full moon, and visibility was only hampered by the dark shadows of the tree branches which covered the short yellow grass with a criss-cross pattern.

About ten o'clock the Lions arrived at the kill; there were eight of them, all females and partly grown animals. As, however, from the tracks I knew that a large male was of the party, I forbore to interrupt the feast, which was soon in full swing, in hopes that he might join it later. It was a most interesting sight. The Lions lay flat all round the carcass, chewing, tearing, growling, and occasionally having minor squabbles. After a time I heard the sounds of another Lion at the further kill, and soon from his voice realized that it was the big male, who all night never once came nearer, but enjoyed his own feast in solitary grandeur.

After a while it became evident that one animal, a three parts grown male, with his mane just beginning to grow, was, for some reason, unpopular with his companions. For whenever he attempted to enter the circle of diners, he was driven away by the others, until at last he prowled up and down just beyond them, voicing his annoyance and staring about for want of anything else to do. Thus after a while he observed me, owing no doubt to some incautious movement on my part, and at once sprang away with an alarmed growl. All the rest immediately stampeded also, and it was a good ten minutes before they returned, at first rather suspiciously. I kept very still, and they began to settle down again, but presently the same young Lion, who had never ceased staring straight in my direction, once more took alarm and again started off. The others rose at once, and realizing that it was now or never, I fired at and knocked over the Lioness which happened to be standing nearest to me. At the distance—about 20 feet or less—of course I should have killed her dead, but night shooting is tricky, and after rolling over once or twice she got up and disappeared, making a lot of noise, from which I deduced she was badly hit. In fact, at daylight I fully expected to see her lying dead near by, but this not being the case, I got out of my shelter and began looking about in the immediate vicinity. Seeing no signs of any dead Lioness, I then in the growing light strolled in the direction in which the troop had disappeared for perhaps a couple of hundred yards, and then returned to the scene of my vigil. Here I found three of my natives, who had come from the neighbouring village at daylight according to instruction to gather up my blankets and other appurtenances. I dispatched one carrying these belongings back to the village, telling him to return with my pony, which had stabled there for the night, while the other two I ordered to await my return where they were, meantime employing themselves in looking about for any blood spoor. I myself intended to take another stroll round, haply to sight the carcass, which I was convinced must be lying not far away. If unsuccessful I planned to return and, with their aid, seriously to follow the spoor.

Shouldering my rifle, I then strolled away on the same line as before. I had proceeded perhaps a quarter of a mile without seeing any sign of Lion alive or dead, when suddenly I was pulled up short by hearing the loud grunting of a charging Lion apparently proceeding from the exact spot where I had left the natives. I hurried back instantly. The grunting continued for a few seconds, growing fainter with distance as the chase evidently led in an opposite direction.

When I got back to the scene of my vigil, there was a great silence. Not a sign of the Lion, of the natives, nor, in fact, of any living thing. I shouted and blew my whistle—no reply. The unburnt grass did not really lend

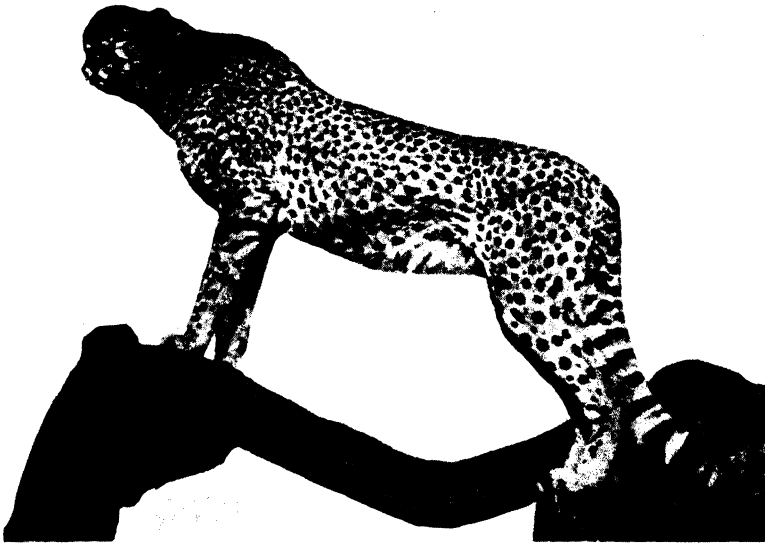
itself to tracking, and after a few vain circles round, and a ten minutes' excursion in what I fancied had been the direction in which the sounds had gone, I returned to find the boy I had sent to the village for the pony. He also had heard the Lion, but knew no more than I did what had happened.

Whilst we were discussing the situation, Ketshima, one of the missing men, suddenly turned up, whole in body, but considerably agitated in mind. After looking about for blood spoor without success, he and his companion, he said, had followed on my tracks, and before they had gone more than 20 yards, one of them noticed a spot of blood on the grass a little way to their right. They accordingly turned in that direction, examined the blood, and began searching about for further indications. Suddenly Mafuta called out, "Look out, there is the Lion!" Ketshima ran to his side and peered, but at first could not see anything. Mafuta pointed excitedly, and then, just as Ketshima had noticed her ear-tips protruding over the top of a small bush about 50 yards away, she came for them, grunting loudly. Both took to their heels, in opposite directions, and luckily it was the young and longer-legged Ketshima whom she elected to pursue. "How far did she chase you?" "How far, do you ask? How can I say, Inkosi; she has been chasing me all this time, I think, and about one arm's length behind me all the time. You can see for yourself how I have been running! No, I don't know what happened to Mafuta, he went the other way, and I don't think she chased him."

Knowing my man to be given to embroidery and, generally speaking, to be endowed with imagination more freely than with courage, my anxieties were chiefly for Mafuta, who was older and less active. However, in ten minutes or so he also duly returned undamaged, and so far confirmed Ketshima's story in that he himself, he said, had not been singled out for pursuit.

I now sent post-haste to camp for the dogs. At that time I possessed a very efficient, if nondescript, pack, and when, after an hour's interval, which I employed in breakfasting, some six of them arrived, no time was lost in getting to work. The still agitated Ketshima led us along what was, to the best of his recollection, the line which he had earlier taken, and before we had gone a hundred yards, the dogs dashed forward. In a few moments they were giving tongue in a patch of thick bush a little way ahead, and the answering growls showed that the quarry had been found. Leaving the boys behind, I made a cautious approach, and presently caught sight of the Lioness in a small clearing, facing the dogs, which were baying her from a few yards' distance. She was so occupied with them that I was able to creep unobserved to within some twenty paces, when a single shot finished her. I then found that one hip had been broken, which of course accounted for Ketshima having managed to outpace her with his long legs, to which terror had lent wings. She had actually chased him, as we found afterwards, for about 50 yards, but he had gone on running for nearly a mile after she had given it up. The Lioness had then hobbled into the nearest bit of thick bush, and had lain down.

The interesting point in this episode was that I had earlier in the morning actually passed the wounded animal within 60 yards on no less than three occasions. But, as I did not happen to look in her direction, and was walking straight ahead, she felt confident she was not discovered, and so lay motionless. So soon, however, as she realized that her position



CHEETAH AND LEOPARD

Plates 11—12

Top. A ZOO SPECIMEN OF A CHEETAH (CHITA).

Bottom. A LEOPARD.

NOTE THE DIFFERENT MARKINGS. THE HEAD IS SLIGHTLY DIFFERENTLY SHAPED, AND THE CLAWS OF THE CHEETAH CAN ONLY BE PARTIALLY WITHDRAWN INTO THEIR SHEATH, WHICH IS VISIBLE IN ITS SPOOR.

was known to the boys, first by their coming straight towards her, and then by their stopping and pointing in her direction, she felt that the moment for action had arrived, and charged at once.

There is no doubt that in Lion hunting, as well as in that of other dangerous game, the hunter is safer, and has better chance of success, if he dispenses with all companionship at the culmination of the hunt. So soon as the trackers have done their work, and the game is located, it is best to make them hide themselves, and to go on alone. The risk of being seen is greater in proportion to the number of persons present, and so is the danger of an accident should the animal be wounded and turn nasty. Of course, if the sportsman's object is to pit himself and his companions against the wounded Lion in single combat at close quarters, that is another matter, and easily done. There will be plenty of thrills if that is the goal, but it rules out finesse and the art of vengerie, nor is it fair to expose unarmed retainers to the risk which is always attendant upon rashly following directly on the tracks into long grass or dense covert.

Another hint for the beginner with Lions is that the golden rule is to get as close as possible to the animal before firing. As a rule there is no more danger in firing at a Lion in the first instance than there is at a Buck, and no risk at all in getting up close to him. Most novices, from excitement, make the mistake of firing the first shot at too great a distance, wounding the Lion, and then blundering on after him into the dense refuge of bush or grass which he is sure to have sought.

Hence the majority of the accidents which occur can nearly all of them be traced to the ignorance or incompetence of the hunter, who is often inclined to be cautious when he should be bold, and bold when he should be cautious.

Often when Lions have been tracked into thick covert where it is hopeless to follow them, the best way is to organize a drive. This is a very simple matter. The hunter takes up his position at the down-wind end of the covert, well concealed behind a good-sized tree-trunk, or patch of grass, while the two trackers proceed to the up-wind side and stand at a safe distance from and one on each side of the covert, make as much noise as possible, supplementing this if necessary and possible by lighting a grass fire. The harem, that is the Lionesses, half-grown males, and cubs, almost always break covert at once and trot rapidly away, but if an old male is of the party he is much more difficult to shift, and sometimes refuses to do so until he imagines the coast to be clear. Often the only method of getting him out is by burning the grass, or by putting in dogs, and even the latter are frequently ineffective if the Lion is determined, and the bush sufficiently dense to give him confidence. Lions make so little noise with their padded paws that the placed "gun" often gets a surprise if his attention has wandered. One may be peering round the right of the tree-trunk, eyes steadily fixed on a point whence the game is expected to emerge, when a light padding noise on the left falls on the ear, and a glance round that side of the trunk reveals a couple of Lionesses, followed by seven or eight cubs, trotting past within eight or ten paces. Rather a nerve-shaking sight at that distance, for a Lioness with small cubs stands on small ceremony, and loses little time in anticipating any danger to her offspring.

The man who has for ten years been my chief tracker possesses an almost uncanny gift for judging exactly whence a driven Lion will emerge

followed up closely, will often charge, it may be said that a wounded Leopard will practically always do so, and though the comparatively small size of the animal renders a mauling from him less often fatal than that from his larger cousin, the results are usually quite sufficiently serious.

Now and then a Leopard is surprised in the open, but my own experiences of this could be counted on the fingers. Possibly because their human enemies were there less insistent, in certain parts of the southern Sudan I came on Leopards in the daytime, and in the open, more often in three years than in ten times as long elsewhere in other wild parts of the continent.

One day I was inspecting the skinning of a Zebra, when I noticed an animal, which at first I took to be a Lioness, slowly stalking across the plain about 500 yards away. The glasses, however, revealed it for what it was, a large Leopard, returning full fed to his lair. Running behind tufts of long grass I easily got to within 150 yards, and knocked him over with the first shot. He was up, however, in a moment, and made for a patch of scrub, receiving another bullet just as he entered it. I had no dogs, and the problem of locating him appeared difficult. However, walking slowly round and round the patch in ever-decreasing circles, and occasionally firing in a shot to tempt him, if alive, to show himself, I at last satisfied myself that he must be dead, and such proved to be the case.

Another time, having wounded a Leopard at night over a water pool, I followed him up at daybreak with one native. On this occasion the Leopard, which was lying behind a fallen log watching us, did not charge at once, but tried to make off and, luckily as it chanced, I broke a hind leg as he did so. He then went into some very thick stuff, where it was impossible to follow him, so I told the native—a Sudanese soldier—to fire a shot from his Martini-Metford rifle at random into the scrub. As it happened, the bullet must have gone pretty close to the Leopard, for immediately he came straight out at us. It was the native whom he saw and made for. The latter was about 40 yards from the edge of the bush, while I was standing slightly nearer and a little to one side. Hampered by his broken leg, the animal could not come very fast, nor did he see me at all until he came exactly opposite me, about ten paces distant, when he suddenly stopped, and of course offered an easy mark. I thought it was a very gallant charge, as he came right out of thick covert across 40 yards of quite open ground.

One morning I was taking a solitary walk soon after sunrise when a Leopard dashed at a young Wart-hog which, with its mother, was rooting about a short distance in front. As quick as lightning, and before the Leopard had reached her offspring, the mother charged in her turn. The Leopard did not face the rush, but swerving, sprang into the lower branches of a small tree, where he crouched growling and grinning at the gallant Wart-hog, who stood determinedly at the foot of the tree. How it would have ended I do not know, in fact it has always been one of my regrets that I did not wait to see, but I was unable to resist the unique chance I had at the Leopard, and so I dropped it, and on the shot of course the Wart-hog made off with all possible speed.

A fatal accident occurred a few years ago in the Sabi Game Reserve, when one of the rangers, accompanied by his father-in-law, a man of over seventy years of age, went after a Leopard which had been prowling

round the camp during the previous night. The dogs, having got on the trail, chased the animal up a deep ravine, and the ranger followed, directing his father-in-law, with one native, to remain where he was, just on the edge of some long grass. The elder man seems to have disregarded instructions and walked right into the grass, with the result that when the Leopard doubled back from the dogs it found him right in its path, was on top of him before it was seen, fell over with him into the ravine, and before it could be shot had practically torn the man's face off, and inflicted other such desperate injuries that he died two days later.

Apart from chance encounters, the Leopard can only be hunted by driving him out of covert with beaters or dogs. In the former case so cunning and alert is he that he will almost always manage to slip away unseen, while if dogs are used, unless they succeed in treeing the animal, the encounter often takes place in such thick and dense undergrowth and jungle that the hunter cannot force his way through until the decision has gone one way or the other. If the pack is composed of large and courageous dogs they will usually kill the Leopard, but seldom if ever without the loss of one or more of their number; when tackled thus he throws himself on his back and tearing with all four sets of claws, as well as with his powerful teeth, he does not form an easy proposition. Should he take to a tree the sportsman may be able to get near enough to shoot him there, while the pack bay him, but on the other hand, more often than not, on perceiving the approach of his human adversary, he will take a flying leap amongst the pack, and again make off.

On the whole the Leopard is not a sporting animal, and 90 per cent. of the Leopard skins obtained are those of animals caught in snares, or killed by trap guns, while most of the remainder are shot at night over baits and kills or at water holes.

THICK-SKINNED DANGEROUS GAME

CHAPTER FOUR

THE AFRICAN BUFFALO

By CAPTAIN G. BLAINE, M.C.

THE African Buffalo may be divided into two main races—the massive black Buffalo of Eastern and Southern Africa, of which the Cape Buffalo is a typical representative, and the little red and brown Bush Cows of Western and Central Africa.

The range of the former extends roughly from Southern Abyssinia, down the east side of the Nile, through Uganda to Tanganyika Territory, thence westwards across the Congo-Zambezi divide to Benguela, to include the whole of South and East Africa to the Cape; and of the latter, from Senegal on the west, down the south side of the Niger basin to Lake Chad, and the Ubangi-Shari basin as its northern limit; thence southwards to the Guinea Coast through Nigeria, the Cameroons, and the whole Congo basin, as far as the northern limits of the Congo-Zambezi divide.

Thus the geographical range of the two races combined covers nearly two-thirds of the African continent, the remaining one-third, with the exception of the countries along the Mediterranean sea-board, being a desert region.

Buffaloes are therefore to be found in most of the African countries that the casual sportsman is likely to visit, and there is scarcely a game country where they do not exist in one form or the other. Of all the larger African game the Buffalo is the most familiar and the most universal, within the reach of every sportsman who would venture to try conclusions with him. Endowed with enormous strength, rugged, massive, and truculent in appearance, he is worthy of every hunter's zeal. Of all the game animals of Africa he is the gamest. He is the one African animal whose courage is beyond dispute, and his cunning and bushcraft when hunted are a match for the most experienced hunter.

Buffaloes can adapt themselves to almost any climatic conditions. From high mountain slopes up to 10,000 feet, and elevated plateaux, down to the hot steamy coastlands, in forests, plains, and dry scrub deserts, such as the parched thorn jungles that bound the lower reaches of the Tana River in Kenya Colony, they are at home, provided that adequate grazing grounds and suitable cover into which to retire during the heat of the day are available, together with regular access to water.

Their usual habit is to drink just before dawn; at sunrise the herd treks briskly back for some four or five miles into the bush, grazing here and there, but without loitering much by the way, to lie up in some suitable cover during the heat of the day. The cover may vary according to circumstances and environment, but a position is invariably chosen

with a view to safeguarding the herd from the approach of an enemy unawares.

A large herd may lie up in several groups, the members of each group closely bunched together, some lying with their heads on one another's backs, others stretched at full length on their sides, while a small detachment of watchful cows may be posted at a little distance from the remainder of the herd in the best position for observation, a favourite spot being often some cover immediately on the up-wind side of an open space, from which to see without being seen, with an outlook down-wind. Buffaloes have excellent sight, and know how to make good use of it, especially in cover.

The herd may shift its position two or three times during the day, to seek fresh shade as the sun comes round, moving only a short distance if undisturbed, a few of its members rising occasionally to stretch themselves and graze for a while.

Late in the afternoon the herd will begin to bestir itself and trek back again, grazing, towards the water. Herds of Cape Buffaloes may aggregate anything from a dozen to well over a hundred individuals, some herds only consisting of cows, calves, and young stock, while old bulls frequently go singly or in pairs, or in small parties.

Bush Cows do not usually run in large herds.

In the Cape Buffaloes considerable variations among the individuals of a herd may be seen, both in the size and shape of the horns, and in bodily size, but the individuals among a herd of Bush Cows consist of a more uniform type.

In countries where Buffaloes have not been much hunted, they no doubt remain in the open for longer periods, but my experience of their habits has been that after 8 a.m. and before 4 p.m. there is little chance of finding them on the move. In fact, in districts where they are frequently molested by human beings, their habits tend to become more and more nocturnal.

On the slopes of Kenya mountain, which is now a settled district, the Buffaloes leave their grazing grounds and retire into the dense forests and bamboo brakes soon after dawn, almost before the sun has had time to warm their backs, with the dew still heavy on the grass, and a cold chill in the air. During the rains, when a white mist clings to the mountain sides, they may remain longer and even lie down in the open, with the shroud of the mist concealing them. But they are ever sensible of the advantage of cover.

In some countries Buffaloes make their permanent quarters in a swamp or reed bed, coming out to graze at intervals on the adjacent grass lands.

In the Loangwa Valley in North-east Rhodesia, a low-lying torrid region where, just before the rains, I once spent a month, the Buffaloes appeared to live much the same life as those of Kenya. They drank before dawn, and were trekking up into the bushveldt away from the river at sunrise. After going for four or five miles, they would stop for the day, often in a fairly open and scantily shaded spot. They may have chosen these places as being more secure from molestation by biting flies, which abounded in this district, including the Tsetse, and also for the benefit of any breeze that might be stirring, for the heat during the day was stifling in its intensity.

Buffaloes and Elephants were numerous in the valley at this time, for the district had been closed to the public for eighteen years on account of

sleeping sickness. The game consequently had not been hunted, except possibly by natives. There were a lot of old bull Buffaloes about, and it was these that I was chiefly interested in hunting, on the chance of getting a really big head, which, as it happened, did not come my way.

One evening I came across a bunch of thirteen bulls together, all mature, and most of them old fellows, several with heads over 40 inches wide, but less than 45 inches. Subsequently I had many more of these old bull Buffalo heads under review during the month spent in the valley, and I took back with me four heads, all over 40 inches and less than 45 inches, having some difficulty in selecting the best head of the four to keep.

This, I think, is no unusual experience when a man is looking for a particularly fine head of any species of game.

A really fine African Buffalo head is one of the most difficult of all trophies to secure. I mean a head with a span of 50 inches or more, and a corresponding width across the palm of 12 inches, the horns sweeping evenly downwards, backwards, and upwards, in a graceful curve, and ending in long points. The bosses of the horns should nearly meet on the forehead, above which they should form a massive dome with a rugged corrugated surface, suggesting an old oak beam. Such is an ideal Buffalo head, and it is one of the finest trophies in the world, and the man who obtains such a head is indeed to be envied.

Heads of this class are rare, and are only carried by exceptional individuals, either in the prime, or just past the prime of life.

In old bulls the ends of the horns get worn away, and the horns themselves become smooth and often stunted in appearance.

It is not easy to spot a good head in a herd. Owing to the colour of the horns and of the body being a uniform black, and owing to their horizontal setting and the low carriage of the head, no clearly defined outline is presented to the observer.

A Buffalo head can only be accurately judged from one position, namely, from a view-point in front of and above the animal. From such a position only can the span of the horns, their curves, and the breadth of the palm be seen together. The ideal opportunity is when an animal is grazing towards you, when his head is being continually lowered, and the horns swept from side to side.

Some of the biggest heads secured have been obtained in recent years, generally from Kenya Colony, but few of these are really beautiful. Some, having a span of over 50 inches, are flat, having no width of palm, spreading horizontally outwards from the sides of the head with blunted points, and a general clumsy, ungraceful appearance.

The finest head I have ever seen was shot by Lieut.-Col. P. J. Bailey, in North-west Rhodesia, of which the measurements are:

<i>Greatest width outside:</i>	<i>Length:</i>	<i>Tip to tip:</i>
49½ inches.	43¾ inches.	35¾ inches.
	<i>Width of palm from point to point:</i>	
	11¾ inches.	

When after Buffalo, an early start from camp is most important, and the sportsman should rise before daylight, and arrange to be on the grazing grounds with the first light; and in the case of Buffalo known to have been

drinking at certain places during the night, he should be in a position to intercept them as they trek back from the water into the bush, or to pick up and follow their fresh spoor just after they have passed. In the last instance, with luck, he may overtake them before they reach the spot selected for their midday siesta. But if it can be arranged to come up with them just as they arrive at their resting-place, he will get the best opportunity for looking over the herd as they loiter or stand about for a short time before lying down for the day.

Following the hot spoor of a herd of Buffalo through bush in this manner is a very interesting and tricky business. Everything, of course, depends on the wind, which in most countries at this time of day is often shifty. The hunter may frequently be obliged to stop, or even retire precipitately on his tracks or to a flank, when the wind begins to veer and be uncertain, or he will stampede the herd just in front of him. A keen look-out must be kept all the time for the tail end of the herd, or for any animals that may be loitering, to appear at any moment through the bush, sometimes at very close quarters, in the least expected direction. The animal that one may blunder into is often a young cow or half-grown bull, and it is very annoying to be given away, through a momentary lack of vigilance, by one of these small fry.

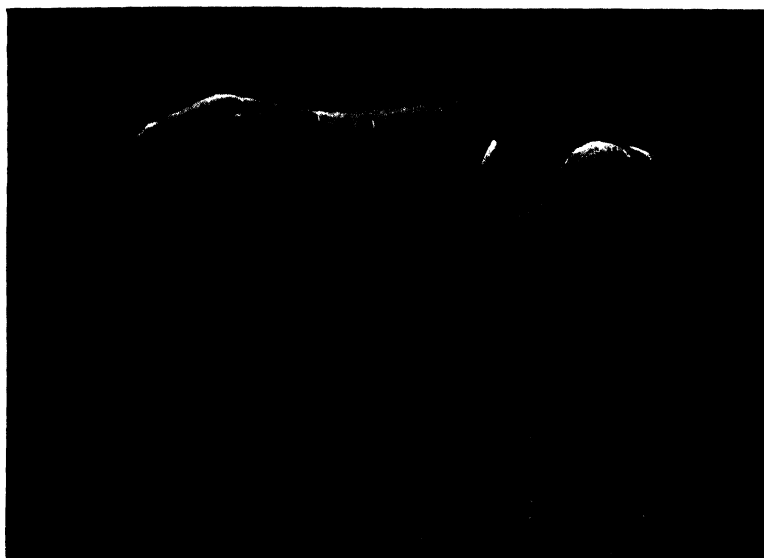
Once a herd is stampeded, the odds are against your overtaking it a second time undetected. You may come up with it three or four times, but its members will be standing on the alert well concealed in cover, and the moment you get a glimpse of a black body through the bush, you may be sure that you have been seen, and they will crash off again.

The only thing to do under such circumstances, is to let them get ahead, giving them about an hour in which to settle down. As soon as the sun gets really hot, they will lie down, but your chance of a shot at a selected beast is now past until the afternoon. You may continue to follow the spoor cautiously until the resting herd has been located. Then if you are keen enough to spend the whole day on the hunt, retire to a safe distance, and take a siesta yourself, until the afternoon. About 4 p.m. you should be in a position to observe the herd, for after this hour, sometimes not till 5 p.m., the Buffaloes will rise and begin to graze. Not before will your patience be rewarded.

Skill, experience, knowledge of bushcraft, and the faculty of being able to move quickly and noiselessly through bush, and above all, of the quick spotting that only is attainable to keen eyesight and practice, all these come into play in this pursuit.

The pace must not be slow, for Buffalo, with their long, lurching stride, walk fast, and to overtake them it is necessary to move at a certain speed. The hunter should be accompanied by no more than two natives, both experienced in the game, one to do the spooring, the other the spotting.

It is when the spoor has been momentarily lost, or has become dispersed, that the chief danger of stampeding the herd arises; for the tendency is then for each man to wander off at a tangent with eyes on the ground hunting for tracks, and this is precisely the point at which the herd may have spread out a little, and are standing still, and consequently more difficult to make out. On such occasions it is a good plan, on losing the spoor, to send the spotter on alone to make good the ground immediately ahead, before proceeding to search for the lost spoor.



Plates 13—14

VITAL SHOTS ON THE BUFFALO

Top. BUFFALO (*SYNCERUS CAFFER*), SHOWING THE SHOULDER AND NECK SHOTS, THOUGH THE NECK SHOT SHOULD BE SIX INCHES TO THE LEFT ON THE PART HIDDEN BY THE HORN.

Bottom. CHAD BUFFALO (*S. N. BRACHYCEROS*), SHOWING THE HEART SHOT FROM THE FRONT. NOTE THAT THIS AND ALL OTHER SHOTS VARY IN POSITION, AS THE ANGLE FROM WHICH THEY ARE FIRED ALTERS SO THAT THEY ARE ONLY CORRECT WHEN MADE FROM THE SPOT FROM WHICH THE PHOTOGRAPH WAS TAKEN.

If Buffalo are moving down-wind, it is waste of time to follow them. Far better to leave the spoor, and search for others in an up-wind direction. In some countries, and notably in North Rhodesia, the hunter is often worried by the persistent attentions of a little bird, the Honey Guide.

It is a habit of this bird to attach itself to any natives that it sees wandering through the bush, drawing attention by its harsh, twittering note. The natives follow the bird, as it flits from tree to tree in advance of them, and are eventually led to a bees' nest. The natives plunder the bees, while the bird sits in a neighbouring tree waiting patiently until they have collected the spoils of honeycomb, when it takes its share of the leavings. Buffalo always run on hearing the chattering note of this bird, and it is useless for the hunter to continue on their spoor until he has rid himself of its unpleasant attentions. The best plan is to get under some cover, and detach a man from the party with instructions to wander off through the bush in a direction away from the spoor. The bird will follow the man, and as soon as he is a safe distance away, the hunting party can proceed.

Buffalo are generally accompanied by Tick-birds, which may be seen clinging to their sides, and bunched up in little clusters on their shoulders, their sharp coral-red beaks pointing skywards.

These birds also warn their hosts of the presence of an intruder, but only on being disturbed at close quarters. They suddenly dart into the air, making a harsh churring note, descending again on to the bodies of the Buffaloes.

When hunting Bush Cows in the Cameroons with a local shoot-man as my cicerone, I was greatly interested and somewhat mystified by his habit of occasionally standing still and looking pensively into the sky for a few moments. I remarked that he always went through this performance in the early mornings, and suspected him of trying to impress me with the possession of some occult power of divination; for he would then casually make some such remark as this: "Bush Cow live for them trees yonder," and lead off in the direction indicated. Sure enough, he was always right.

This mysterious process of divination puzzled me for some days, until, one morning, following the direction of his gaze, I espied a small party of Tick-birds flying high across the sky, suddenly make a headlong dive into a certain patch of bush. The shoot-man immediately remarked that "Bush Cow lived in yonder bush," where, as usual, we found them. The Tick-birds, leaving their roosting places at dawn, fly high in search of their hosts for the day and, having spotted the Bush Cow, waste no time in joining them.

This habit of their makes it a simple matter to locate Bush Cows in this particular country.

White Egrets, or Cow-birds (*Herodias*) also associate with herds of Buffalo, and Buffalo may be located at great distances in an open country owing to the presence of these birds, which appear as glistening white specks above the level of the grass.

The spoor of a herd of Buffalo is one of the easiest of all African game tracks to follow. The broad, flat hoof-prints with their sharp-cut edges make a clear imprint even on hard ground, while grass is trampled flat, as by a herd of cattle, and the bush at intervals appears bruised and broken by the passage of the bulky bodies. For this reason I consider that Buffalo are the most satisfactory of all game for teaching the novice

the art of sporing. Once he has gained a little experience, he will find it a most absorbing pastime. The spoor is easiest to follow during the early morning hours, when the dew is still upon the ground, and the sun, casting oblique shadows, defines more incisively the impressions made by the hoofs.

When the sun is vertical there are no shadows thrown upon these impressions, and the infraction of light from the ground-surface is very tiring to the eyes, the strain of which does not affect the black man's eyes so severely. I find it a good plan to follow a spoor a little to one side, and not directly on top of it. It also seems to me that, from this position, one has a better chance of spotting the objective, especially if it is a single animal.

Let us suppose that the hunter has closed up to within shooting range of a herd. The distance should not exceed 100 yards—I am here expressing only my own opinion—even better 50 yards, and better still 30 yards, where Buffalo are concerned. He must decide promptly upon his future course of action. If he is merely out for meat, he will probably get an easy shot; but if for a head, it will be quite another matter, unless luck is on his side.

The easiest shot is right through the centre of the shoulder for an animal standing approximately broadside on, rather below the central axis of the body, or about two-thirds of the distance measured downwards from the top of the withers to the underline of the body. The effect of this shot, from a powerful modern rifle, will be to penetrate the lungs and smash some of the larger blood-vessels near the heart, or possibly the heart also, with the added effect of probably breaking one of the shoulders and so crippling the animal.

A shot behind the shoulder may be more directly in line with the heart, but allows no margin of error. If a trifle too far back, or too high or low, there will be a wounded and active animal to deal with afterwards.

A still more deadly shot is through the neck, from a central point near the junction of the head with the neck, continuing rather lower towards the shoulder. If the bullet strikes the vertebræ of the neck fair and square, the Buffalo will drop in his tracks as though pole-axed, and will not be able to rise again. But for this shot it is necessary to be close up, in order to make sure of not striking the horn on that side which, in its downward and upward curve, covers part of the neck.

The third shot, for an animal standing head on, is in the chest. But for this shot to be effective, the sportsman should be sitting or lying down, to ensure that the trend of the bullet is on a slightly rising plane. A Buffalo stands very low on its legs, and the trajectory of a bullet from a standing shot, taken on level ground, will have a downward trend, passing through the lower part of the chest and brisket, and avoiding the vital parts.

A chest shot at Buffalo is most effective when the animal is standing on ground above the sportsman.

A Buffalo, advancing head on, is one of the most difficult animals to shoot, as he runs with nose extended and horns thrown back, his face being in almost a horizontal plane. Owing to his low-slung body, it is not easy to obtain a satisfactory shot at his chest, unless one is kneeling or sitting down, and a shot for the brain, unless placed with extreme

accuracy, is likely to be too high, and may glance harmlessly off the frontals of the horns. For these reasons, a charging Buffalo presents a difficult target and, under stress, the sportsman is liable to shoot high. When placed in such a predicament, the sportsman should reserve his shot until the animal is at close quarters, and then aim at the outstretched nose. A solid bullet discharged from a powerful rifle at close range, will almost certainly turn or knock down a charging Buffalo, if it strikes him square in the nose, and if an inch or two higher, would probably penetrate the forehead between the eyes and reach the brain.

The question of what rifle to use depends upon the sportsman's individual choice, but I consider that a rifle of not less than .350 bore is advisable when shooting so massive and formidable an animal as a Buffalo.

Practically all modern rifles made by well-known firms are efficient and reliable, but in dealing with dangerous game the sportsman will be wise to use the heaviest weapon that he can handle freely and effectively.

The knowledge that he has the power in his hands to stop a charge with a well-placed shot, will give him confidence, and will tend to make him shoot better in an emergency. The bullet should have either a solid nickel casing or a casing of nickel with a small rounded lead point. The long tapering pointed bullets are not to be recommended.

The Buffalo shares with the Lion and Elephant a reputation for being dangerous. The question of which is the most dangerous of the three has been discussed by various writers.

I hold no strong opinion on the subject. Any one of the three is capable of coming back at you on occasion. But a Buffalo, once he has made up his mind to fight, is not easy to deflect from his purpose. He appears to be an animal of one idea, obstinate, vindictive, and dead game, and he will not admit defeat until he dies.

It has often been stated that wounded Buffaloes have a habit of turning back upon their spoor and deliberately lying up to ambush the hunter. My experience in hunting them has not produced any evidence to endorse this.

A Buffalo, when badly wounded and unwilling or unable to remain with the herd, frequently takes a very devious course. He will turn off at right angles to pass through some thicket, then on again in another direction into a patch of long grass, and he may continue this winding, uncertain progress for several miles. In this action he appears only to be searching for a quiet spot exactly to his liking in which to lie down and rest and nurse his wound. A hunter following such a spoor is quite likely to pass the place where the Buffalo is resting, leaving it on his flank or even in his rear and, under such circumstances, an unexpected attack at close quarters is not unlikely.

It is a good plan, when following a wounded Buffalo, not to walk directly upon the spoor, but to keep parallel to it at a little distance, on one side or the other, with due regard to the wind, and to cross it at intervals

Editor's Note.—Mr. N. B. Smith recommends waiting till the last moment, when the Buffalo puts his head down, as he invariably does at the end of a charge, and then planting a shot into the top of his withers. But this requires confidence begot of experience, and might prove costly to a beginner.

of 100 yards or so, keeping, as it were, in touch with the spoor, but not following it directly. This procedure takes a little practice, and cannot be carried out under all conditions of terrain. For instance, it would not be practicable in forest, or through heavy undergrowth. One can generally get a better view of the animal one is following from an oblique angle than from immediately behind and, at the same time, one's eyes are not being attracted to the ground at a time when they should be employed in looking well ahead. If you have two natives with you, one should be keeping in touch with the spoor, while the other is entirely occupied in spotting. It is advisable to make frequent halts, and to scan in detail all the adjacent cover. It is often of advantage to lie down, when a view can be obtained along the ground. This is particularly applicable to sandy thorn-bush country, when a better view of an animal can generally be obtained from the ground level than from any other point of vantage. Under such conditions, if an animal is lying down, it is often the only position from which it can be seen.

A Buffalo is much more inclined to attack when it sees the hunter than when it only smells or hears him. My impression is that a Buffalo will generally run on scenting a man but, hearing a sound, such as the snapping of a twig or the dislodging of a stone, attracts his attention and sight to the direction from which the sound came.

If you come suddenly on a wounded Buffalo, and shoot quickly, the shock will probably stop a charge and send him in the other direction, if you give him no time to think. If he has once started to come towards you, shoot with more deliberation, for you will either have to knock him down or shoot him dead.

A Buffalo, when wounded, invariably makes for cover. When this happens to be a reed bed or tall grass, the task of following him into his retreat becomes one of great difficulty and danger. In such circumstances, the hunter, especially if he is not experienced, should weigh very carefully in his mind the risk he is taking in following up the wounded animal. A sportsman is instinctively averse to leaving a wounded animal, but to follow a Buffalo into a dense reed bed is asking for trouble, and the man who is rash enough to do so will probably find it.

A man in such a place is in a helpless position. He is hemmed in and hampered at every step, and can only see a yard or two in front of him. He cannot move without making a noise and, in the event of a charge, almost certainly at close quarters, he is powerless to shift either to right or left, and his only chance of defence is a single shot from a very unstable stance.

He may even have no time to let off his rifle at all. Is it therefore to be wondered at that so many men have lost their lives, or have been crippled for life under such circumstances?

My advice, although it may be unorthodox, is to pocket your pride, and not to follow a wounded Buffalo into such places. At any rate, before doing so, you should consider carefully the risk you are running. Your subsequent course of action is your own business. By all means do your utmost to put an end to the sufferings of a wounded animal, and in so doing take all reasonable risks. No difficulty or fatigue or sense of boredom should deflect you from this purpose. But I think that a man is justified in turning back when he finds himself in a position over which he has no control.

Such considerations are of the very essence of hunting in a wild country. You decide your course of action as the circumstances arise, unhampered by foreign interference.

After taking a shot, do not jump up and run after your quarry, but remain quietly where you are, observing intently its actions as far as you can see it. Running will make you hot and excited and, in most cases, will do more harm than good. The natives with you will also get excited, and will probably outrun you, and then anything may happen. There are certain occasions when running after taking a shot are justified, but the novice had better not make a practice of this until experience has taught him when to employ it.

On approaching a wounded animal that is down, when it is often difficult, especially in cover, to see whether it is dead or alive, always do so cautiously from behind, keeping a little on the opposite side to that to which its head may be turned, so as to be out of sight. If the animal is still alive, and its intentions are aggressive, it will be obliged, when getting on to its legs, to turn round to meet you, offering a good opportunity, as it turns, for a knock-out shot. A Buffalo, when just about to die, generally gives vent to a low, moaning bellow, but it does not always do so.

A gentleman who has settled in Kenya Colony, who is both an experienced hunter and an observant field naturalist, gave me, when I met him a few years ago, some interesting information on the habits of Buffalo. He had, on his farm, two or three young Buffalo running with his oxen, which he had captured himself when they were calves. His mode of procedure, which appeared to me to be lacking in neither enterprise nor hazard, was to mark down a cow with a young calf, and then, with the assistance of several natives trained to the job, to run down and forcibly seize and abduct the calf. Strangely enough the mother, seeing her offspring thus rudely seized under her eyes, never directly interfered with the raiders. She would rush up to within a few yards, with anxious, staring eyes, and then appear undecided what to do next. But, if the herd was near, and the calf, on being held, began to bleat, any bull in the herd that happened to be at hand, would come to the rescue without hesitation. In such a crisis it often happened that the calf had to be released, when the bull, staying his onslaught, would instantly retire, taking the calf with him. On one occasion a young, half-grown bull had come to the rescue and had boldly attacked the raiders, freeing the calf and retiring with it to the herd.

This story throws a very interesting light upon the habits and character of Buffalo. The herd instinct must be very strongly developed, even at an early age. No doubt the members of a herd co-operate in this way in warding off the attacks of their natural enemies.

The Lion is the only enemy, apart from man, that the Buffalo has to fear, and a single lion will rarely have the courage to attack a full-grown Buffalo bull, although he will kill a cow, or a young, half-grown animal without much difficulty.

When the suspicions of Buffalo are aroused, they behave differently from Antelopes. The latter stand on the alert, stamping and snorting, sometimes advancing a few yards only, to get a better view of the object that has aroused their suspicions. But in the case of Buffalo a much more searching scrutiny will take place. Generally an old cow, sometimes two

or three members of the herd, will advance, cautiously nosing along towards and around the suspicious object, nor will they be satisfied until they have made a thorough investigation. When this occurs, the game is up as far as the hunter is concerned, for his presence is invariably detected when they get behind his place of concealment and are given his wind.

The pursuit of Buffalo in forest, although interesting from a scenic point of view, rarely ends in a successful hunt. It is possible to get very near them and hear their loud, sharp grunts in all directions as they move about, and their heavy breathing if they are lying down. But a position of stalemate usually follows. There is a sudden oppressive stillness, and a cow's head may be poked through a bush, rather too close to be pleasant, a great black bulk with tail curled upwards almost brushes by you, followed often, a few seconds later, by a sudden crashing and heavy thud of hoofs and violent upheaval of the undergrowth as the herd stampedes. You feel for the moment a desire to efface yourself, but are reassured by the friendly presence of a substantial tree-trunk, towards which you have instinctively been drawn. The crashing fades out in the distance, and may stop suddenly, not far off.

A second or a third attempt to get on terms yield similar results, and then the herd treks steadily off to a more remote part of the forest.

The best chance of a shot at forest Buffalo is obtained by wandering along the edge of the forest glades in the early morning, or waiting for them to come out into a clearing to graze, in the late afternoon. If a herd is known to contain a desirable head, it may be carefully spooled up in the daytime, and its position located in the forest without disturbing its rest. The hunter may then repair in the afternoon to any clearing which he judges may be frequented by the herd for grazing, when he will be much more likely to be rewarded with success.

Buffalo, for all their bulk and short legs, are very active animals. Once, in Northern Rhodesia, four bull Buffaloes, one of which was slightly wounded, after running for several miles, had been suddenly confronted by a deep nullah with precipitous banks, which lay across their line of retreat. It would have taken a good horse to have cleared it, but all four Buffaloes had jumped it without hesitation, as was clearly shown by the marks of their hoofs where they had taken off on the near side and landed clean on the farther bank.

Following the trail soon afterwards, I was astounded at this feat, for it took me and my native hunters some time to find a place where it was possible to cross.

A herd stampeding immediately closes its ranks. The compact mass of animals runs with a heavy, rocking gallop, a heaving jumble of horns and upcurled tails, and if in dry weather and in the open, raising clouds of dust along its trail.

Soon the whole herd halts, and the rearmost members turn round, with horns thrown back and outstretched noses, to stare at the cause of their alarm, then, with concerted action, off they lumber again.

Buffalo, when undisturbed and resting, present a very happy family picture. Some will be lying stretched at full length on their sides, some will be resting their chins on others' broad backs, while a couple of calves may be seen scampering in and out, playfully butting each other. The

members of a herd give the impression of being very much attached to one another.

Two or more old bulls are often to be found consorting together. These keep well away from the large herds, generally in some little out-of-the-way retreat, where they feel they are not likely to be disturbed. Old bulls, when wounded, are no more likely to turn nasty than young ones; in fact, I think the odds are more in favour of a young bull charging than an old one.

As regards the different races of Buffalo, the little West African Bush Cow is, on the average, much more bad-tempered than his big East African relation. This is not to be wondered at, since the Bush Cow is constantly being harried by the local native shoot-man, who resides in nearly every West African village, and who makes a speciality of hunting Bush Cows, not only for the meat and other appurtenances, from the sale of which he makes a satisfactory profit, but also because of the prestige that it confers upon him among his neighbours. He shoots them with his long, muzzle-loading gun with a flint lock, loaded with black powder and home-made bullets or slugs. The bullet is sometimes fashioned out of what appears to be a biscuit tin cut into strips and compressed into a ball.

These, with little cubes of iron, are often found embedded in the flesh just beneath the skin under an old scar in the hides of Bush Cows that one has shot.

Out of seven Bush Cows that I shot in 1914 five were found to be in this condition.

The kind of country frequented by Bush Cows usually consists of orchard bush, or patches of forest and long grass, which in West Africa is generally denser than similar country in East Africa, and cover, into which they can immediately retreat, is always close at hand.

Bush Cows, also, being smaller than the big East African Buffaloes, are less easily seen in grass or bush. They are very quick and active, and will climb up almost perpendicular banks of earth and, when running through cover, dive under low branches of trees, and can thread their way through the densest vegetation.

The genus *Syncerus*, representing the African Buffaloes, has been systematically divided into two species, *Caffer* and *Nanus*.

I would rather regard them as groups, for, where the two distinct types approach one another in character, it is difficult to draw a line between them. *Caffer*, or the southern and eastern group, ranges widely over Southern and Eastern Africa, as far north as Abyssinia. *Nanus*, or the western group, extends from Senegal to the eastern boundaries of the Congo, and from Lake Chad to Angola. In the latter country representatives of both groups are found, *Nanus* being principally confined to the coastal belt north of Benguela.

S. caffer caffer of South Africa are found as far north as the Zambezi, and *S. nanus nanus*, the little red Ituri Forest Bush Cow, are representatives of the two extremes.

The former is a massive black animal, standing nearly 60 inches at the shoulder, with a wide face and muzzle, and a convex profile. The ears are broad and not heavily fringed. The coat is thin and, in old animals, the skin is frequently nearly bare. The horns are spreading, and sweeping widely downwards and backwards, with long, upturned ends.

The horn bases are thick and corrugated, often nearly meeting in the centre.

Nanus is a lightly built animal standing about 42 inches at the shoulder, with a narrow and longer face and a slightly concave profile. The ears are heavily fringed. The body colour is a tawny red, which becomes suffused with black as the animal advances in age. Very old individuals of both sexes may turn completely black. The hair does not wear off, as in old individuals of *caffer*. The horns are short, widely separated at their bases, and rise from the forehead outwards and upwards in a flat plane, being crescentic in form. *Nanus* is a browser, there being no grass in the true forest that is its home. Between these two extremes are a great variety of types which Christy¹ has designated as marginal forest Buffaloes, those inhabiting the margins of the great forest tracts, and the heavily bushed areas of the kind known as orchard bush, where grass is abundant, which forms the predominating feature of the vegetation of West Africa.

Many of these are large heavy animals, and they all have the crescentic type of horns, separated at their bases, and coats of various shades of a fulvous or brown colour, changing to black with age.

Generally speaking, the latter races are found in the drier and more open countries, such as the region of Lake Chad, and the Shari basin.

The Nile Buffalo, although approximating to *caffer* in size, and resembling it in its general features, has certain characteristics which suggest an alliance with the *nanus* groups.

One may suggest that the ancestors of the present races of African Buffaloes resembled in type the elementary little red forest Buffaloes which, emerging from the forests, spread over the grass countries of East and South Africa, to attain the final expression of their evolution in the great black Buffaloes of those regions. The trend of evolution towards the north-west and south-west may have been restricted by conditions less favourable to their development in countries where the grazing lands are more restricted in area and the grass itself is of inferior quality.

This theory also agrees with the general trend of melanistic forms in certain Antelopes, such as the Kobs, Lechwes, Bushbucks and Bongos, which share, with the Buffaloes, a tendency to become black as they extend eastwards.

¹ *Big Game and Pygmies*, Christy. Macmillan & Co., Ltd. 1924.

THICK-SKINNED DANGEROUS GAME (Continued)

CHAPTER FIVE

THE AFRICAN ELEPHANT

By DENIS D. LYELL

IN Elephant-hunting the following are the main points to be considered:

- (1) Keep the wind right, *i.e.* blowing from the quarry.
- (2) Get fairly close. About 30 yards is a good distance for the brain shot, and ten paces nearer is still better.
- (3) Do not hurry, when one is sure the Elephant has not seen, heard, nor winded one.
- (4) In fairly open ground do not make quick movements, for movement is the thing which attracts the eyesight most.
- (5) Make as little noise as possible and do not allow loud talking.
- (6) When an Elephant falls to the brain shot do not leave it until certain it is dead, as it may only be dazed and able to rise and get away.

Don't wear too heavy clothes, especially the footgear. The heavy, hobnailed boots used for home shooting are much too weighty, though the kind now procurable with composition rubber soles well studded with knobs, might do. Crêpe rubber soon cuts to pieces and is rather heavy and slippery.

Lightness applies almost equally to clothing, and I found that the following suited me best: A double Terai felt hat, a khaki shirt with only one breast-pocket on the left side (as one on the right often catches the rifle-stock). Sleeves left long, so that they can be let down in heavy thorn country. Khaki shorts, double hemmed next knees, to stand hard wear, socks and light boots or shoes. I could not stand heavy gaiters or putties, as the latter were unbearably hot and cramping. Sometimes I wore light gaiters of gabardine. Leather is too stiff and noisy. A strong leather belt held a watch-case and a pouch, a magnifying-glass, some fuse, a small pair of tweezers for thorns, and a small cartridge-case filled with permanganate of potash. I invariably carried a Bushman's Friend knife in its sheath. In my cartridge-bag I always had a note-book and pencil and a steel six-foot tape measure and an emery stone for sharpening knives. Lastly, a small looped canvas holder for belt to take six rounds for my small-bore rifle. All these articles were light and every one of them was useful at some time or another.

Regarding rifles I always used small bores, and have tried many types, from singles to doubles. I prefer the magazine action, for the main reason that it is light, and after, say, two shots have been fired, one still has three in reserve. Then, a small bullet in the right place is better than

a large one in the wrong, and no white man can carry an eleven-pound rifle on a long day through rough bush in tropical Africa. If a gun-boy carries it, that individual is usually lagging behind or up a tree when most wanted.

It does not matter what bore is taken, so long as the proper type of bullet for the animal hunted is used, and all the thick-skinned game require solid-sheathed bullets of the blunt-pointed kind. Sharp-pointed bullets are unsatisfactory, as the tips get bent on rounded hard bones, and are thus deflected from their course.

Accuracy is the main essential, and it follows that the best work can be done with the rifle used most for the commoner animals, as one has got thoroughly accustomed to its handling and the nicety of its shooting by constant practice.

The bores I used most were 7.9 mm. (.311), .303, .275 and .256; but I tried various others, including a .318, which was an excellent killing weapon. What one needs for the thick-skinned game is a bullet with plenty of drive.

When after Elephant—and the same applies to Buffalo—it is important not to fire shots round camp, for the sounds will inevitably drive the animals away. The thing to do is to kill a buck or two before coming near the Elephants' haunts, and bring on the meat for the sake of the carriers and oneself.

The camp should be made outside a village in the shade and near water.

Next morning the tracker should go out and look round the native gardens for spoor, as the Elephants often come to eat the grain or the stalks left lying about. The vicinity of a stream or water-hole is the likeliest place for finding tracks, as Elephants often come quite near villages to drink, if the surroundings are wild, and when they have not recently been much molested in that locality.

There are several races of the Elephant in Africa, the variations being of more interest to the naturalist than to the sportsman, so it is hardly necessary to define the differences, with perhaps the exception of the Congo dwarf variety, which seldom grows tusks longer than $3\frac{1}{2}$ feet, and is so scarce and localized that few hunters are likely to come across it.

From constant persecution the large tuskers are much more difficult to find than they used to be, for much molestation has forced them to change their habits of life in a great degree. Instead of great herds of bulls, cows and youngsters spending their days in sparse bush and open plains, the animals are becoming extremely wary, and the large tuskers in particular now seldom leave the thick bush and forest until the darkness of night veils their movements, and safeguards them from their great enemy, man.

Of all sports open to the lovers of the rifle and the hunting of game in the wilder parts of the earth, Elephant shooting is probably one of the hardest, for a man has to be thoroughly fit in wind and limb if he is to prove successful in such a pursuit. He need not be a crack rifle-shot to floor a big bull, but he must be able to shoot coolly and steadily. An adult bull Elephant's brain is, roughly, fourteen inches long, half as thick, and slightly sausage-shaped in the middle when viewed in profile. It is not a large mark when we consider it is hidden in the massive skull



Plate 15

VITAL SHOTS ON THE ELEPHANT

A ROUGH INDICATION OF THE THREE FATAL SHOTS HAS BEEN MARKED BY D. D. LYEELL, THE BRAIN, THE HEART AND THE LUNG SHOTS.

and surrounded by cellular bone. So the beginner, after he has killed his first Elephant, should get his natives to hack the skull in half, so as to examine the exact shape and position of the brain.

When an Elephant is standing asleep in heavy bush or grass he will often be seen swaying with a fore and aft motion. This movement makes it extremely difficult to get him in the brain, as can be readily understood.

Personally, I never saw an Elephant sleeping in a recumbent position, although I have seen where they rested in this way, with the marks of their skin and tusks showing clearly. The small-bore enthusiast will likely prefer the brain shot, which is, on the whole, the most efficient, because, should that organ be punctured, the matter is successfully concluded.

For either the brain or the heart shot, the great difficulty is the angle presented, which of course depends on the relative positions of the game and the hunter. Movements by the Elephant, and the intervening vegetation, may add to the difficulties.

The result of a correct brain shot is final, as the Elephant simply collapses in his tracks. Should an Elephant, after falling, make the slightest movement, it is best to run in from slightly behind and put one or two bullets into his earhole, ranging forward. Many a hunter has knocked an Elephant down, gone on without finishing it, and returned to the place to find that it has vanished.

The best brain shot is one into the orifice of the ear, which means that the hunter will be slightly behind, half-rear profile, so to speak. The next best shot is half-profile from the front, so that the shot goes between the eye and the earhole.

The full broadside position is also good, but if the bullet goes too low the protuberance of the lower jaw may intercept the bullet and deflect it.

It is a mistake to hurry, and here the beginner will be tempted, for he will likely be excited and keen to get the business over. There is little danger if he is near an unwounded Elephant, which, nine times out of ten, will bolt when it becomes aware of his presence. This is where the experienced man has an advantage, as practice and knowledge of the animal's ways will show him when to seize the best moment for his shot.

The heart is the best target for a large-bore rifle, though it is an equally killing one with a small bore.

There used to be an idea that the bottom of an Elephant's ear was the right spot for the heart, but this is quite incorrect, as that organ lies much lower, being about one-third up from the bottom of the body, and not one-third down, which the lower rim of the ear denotes. I know of a number of good bulls being lost through this belief.

All animals' hearts lie fairly low in the chest cavity, and even to shoot at the centre of the shoulder is wrong, though the bullet might get the large arteries.

For a full broadside shot at the heart the bullet should go through the bone of the near foreleg, so, by far the best position is to be slightly behind and get the bullet into the soft part, low, behind the shoulder. It may hit a rib, but such a thin, flat bone will form but little obstruction to a solid H.V. bullet.

From the front, full face, a deadly body shot is the lower point of the hollow which forms a triangle in the chest, and the first Elephant I ever

killed was hit there. He fell backwards, and never rose again, as the bullet cut the big heart artery.

The advantage of a brain shot is, that an Elephant, when properly hit there, makes no sound afterwards; whereas, with a heart shot it usually runs some way and disturbs others, if it is one of a herd.

The lungs of an Elephant, unlike those of any other mammal, are not contained in a bag, but are attached to the inner walls of the chest cavity. They are placed fairly high behind the shoulder, but come lower than in most other game.

There is a strange effect caused by a bullet through the lungs which I have noticed several times. After the shot the beast rushes off at a good pace, and then, going a varying distance, it suddenly stops and puts its trunk several times straight up in the air. This is a certain sign that it is choking to death, due to a suffusion of blood in the lungs.

Heart blood is the usual red colour, lung blood is light coloured and frothy, and kidney blood a brownish red.

There is a great difference in the effect of a heart shot. Death occurs much sooner from a wound in the upper part, where the big arteries are placed, than it does when the lower end is lacerated.

When a wounded Elephant is seen standing with his back towards the hunter, a bullet in the centre of the spinal column, even from a small bore, will usually paralyse him and enable the hunter to get round and put a finisher in his brain. This is not a very sporting shot, except at an animal already wounded. Another is a shot in a foot, which I have seen mentioned in books, but, it is, in my opinion, a cruel shot to take. Moreover, though I have never tried it, I do not believe it would cripple an Elephant enough to prevent it escaping.

After firing, it is a great mistake to start running away from the Elephant, though it may be necessary to dodge to one side if he comes for one. The thing to do is to stand still and keep on shooting at the most vital spot in view and, when using a magazine rifle, to keep a couple of shots in reserve for eventualities.

If in heavy grass and on an Elephant track, it is wise to get off it, as Elephants, when they bolt, usually choose a path if there is one. The primary point is to keep the wind right, as Elephants generally charge by scent in the first instance, so, if standing to windward, move round a bit to get the wind more favourable.

A small cotton bag filled with fine flour or wood ash is a useful item, as a shake or two will give one the drift of the air. The natives usually pick up sand and drop it, or crush some dry grass in their fingers and let this fall to get the direction of the breeze. The smoke of a pipe is perhaps the best of all, though one cannot keep smoking all the time in the heat. It is a fallacy to say that tobacco gives one away, for if any animal can smell this weed it will easily get a human scent, and of the two aromas the latter is the more likely to make them bolt.

It is a good thing to make a habit of reloading immediately after the shot. The rattle of a magazine bolt will not then be so apparent among the echoes of the shot, and the beast will naturally be flustered by the pain and shock of the wound it has received. A wounded Elephant often stands quiet to listen for any sounds of its enemy, on hearing which it may charge. The reverberating echoes of a shot are difficult to locate

exactly, and many cases are on record of an Elephant making a blind rush to some point in its efforts to get hold of the hunter and missing the place by some distance.

Once, just after firing at a bull, a Wart-hog jumped up some seconds after the shot and the Elephant charged in that direction and seemed surprised he could find nothing to pulverize.

I believe Elephants can smell a man at quite a mile off provided the wind is strong and steady. Once I saw a small herd crossing an open space in the bush, stop suddenly and sniff the ground, making a rumbling sound as they stood over the place. They then ran away and, on going to the spot, we found spoor of natives which must have been quite two days old. Elephants often cross native paths leading between villages, which must accustom them to the aroma of mankind, and they often drink at water holes or pools where the human inhabitants get water. Possibly they have the instinct to know when they are being hunted, though if this is a so-called sixth sense, it is only, in my opinion, a sense of self-preservation.

Elephants are very difficult to see when standing in very heavy bush or forest country, where there is diffused light and shade. They often look like shadows, even when they move about slowly. At one moment one sees an Elephant, and if one glances away and looks again it has vanished like a spectre. In such localities the judging of true angles is much harder than it is in more open country, although thick stuff has the advantage of enabling the hunter to get to close quarters.

The worst mistake the novice can make is to fire long and uncertain shots at dangerous game, and then rush after it through all kinds of bad cover, instead of going close up for the first shot. At least half the fatal accidents to sportsmen have been due to this, not only in the case of Elephants, but also of Lions and Buffaloes. Let the beginner remember that few of the dangerous animals are inclined to be nasty until they are wounded. The only exception is when a female may charge in defence of her young, which is much less common than many believe.

The most remarkable characteristic of Elephants is their immense strength, for they break down very large trees. Some of these trees are very hard and tough, and at the time certain fruits are ripe they will destroy acres of fresh timber.

Elephants are capable of travelling for great distances to get food and water, or when changing their range, and their pathways across mountainous ground are wonderfully chosen for the easiest gradients. When trekking hard they generally go in single file, but sometimes, when they find suitable food, will stop to feed. In feeding they spread out on a broad front and, when following a particular animal, the spoor may take one into a semicircle of Elephants. Often, too, when tracking a single bull or small lot, they will take one right into a big herd. They are noisy when they reach water, especially if the heat is great, which it often is in the dry season. The cows and youngsters are naturally more vocal than the staid old bulls, which often keep to themselves, except in the breeding season. In India it has been found that the period of gestation for a male calf is twenty-two months, so this is probably also applicable to the African species.

Constant persecution makes all game move warily, and Elephants

now trek great distances between their drinking places. In North-east Rhodesia I have known them desist from drinking from the same place two nights in succession and travelling over sixty miles to get water.

Sometimes they suck up sand in their trunks and blow it over their bodies which, judging by the heat of the soil would seem a warming and not a cooling action. Perhaps it may disturb irritating flies which bother them?

Often, when approaching Elephants, strange gurgling sounds will be heard from their digestive organs, or a contented rumbling in a low key. When annoyed they scream with a very high note.

The feet of Elephant bulls measure from 50 to 60 inches in circumference, and any spoor of about 18 inches in diameter is worth following. As a general rule the large spoor belongs to the biggest beast.

What becomes of Elephants which die a natural death or escape badly wounded has always been a puzzle. I have for long believed that many get bogged in soft ground and disappear. This was corroborated recently by a short article in *East Africa*. The article was accompanied by a most interesting photograph, showing an adult Elephant struggling in a morass, shortly completely disappearing out of sight.

The yarn about Elephant cemeteries is, in my opinion, a myth. When an Elephant or any animal dies the vultures spot it, or the hyenas scent it, and, between them, attract the natives. Naturally, the tusks are removed as the perquisites of the native chiefs, or, in present days, as treasure trove to Government, and the carcass is broken up. This applies to single beasts.

As to a collection of Elephant skeletons in a narrow area the following is the solution.

A herd of Elephants emerging from bog are ambushed by a crowd of armed natives and a large number killed on the spot. The ivory would, of course be removed, and the bones scattered. This is a fairly common event in the Sudan.

In Nyasaland and Northern Rhodesia tusks of over 60 lbs. are scarce, although twice I saw tusks weighing over 100 lbs.

In dry weather all ivory is apt to crack, so that it should be rubbed with beeswax or some similar substance.

The usual procedure, when after Elephant, is as follows:

Having camped by some village in the vicinity of Elephants, and having got information of good spoor, it is important to make the earliest start possible after dawn. I usually had a tracker and three or four men with me. The tracker should carry nothing but his spear or a sharp axe, both of which are useful for turning off vegetation, or breaking a track. I usually gave him half a dozen cartridges to carry for me. He should do most of the spooring, and the hunters follow close behind. The tracker should be told to signal and not to talk, and that, on sighting game, he should crouch, so as not to impede the shooting. The rest of the men should be kept some hundreds of yards behind, and on no account to close up unless sent for. I lost the finest tusker I ever saw through this, as the animal got their wind when they were approaching me.

Two of the men should have a gourd of water with banana or other leaves on top to keep the fluid cool and unspoil. One man should carry an axe, the most useful implement in the bush. A third man will have a

native basket in which should be put a small kettle, a cup, tea and sugar, bread or biscuits, a tin of meat or sardines and a spare box of matches. In case of a night out a blanket stuffed in on top may prove a comfort, and so will an old tweed jacket. A cartridge bag, camera and field-glasses should also be distributed among them.

All the party should keep together until a good spoor is found, which may be soon after leaving camp or not until nearly midday. Then the tracker and hunter go ahead, after giving final instructions about silence and the distance between parties.

Possibly one of the followers can spoor well, and may replace the tracker when he gets tired, for tracking is a great strain on the eyes.

Anything up to six hours is an easy day's spooring, as the Elephant may be miles ahead before one starts. An Elephant probably walks at six miles an hour, going slowly, and stopping at times to seize a mouthful, but if he is walking fast he will stride along at a good eight miles per hour. He generally begins to slacken his speed towards midday, when he will stand in a shady spot. It all depends on whether he has been recently molested or not, so no definite rule can be fixed. Perhaps, with luck, the hunter will get his shot early in the afternoon and floor his beast. Then he will rest for an hour or so before going back to camp in the cool of the evening. Spooring will often take one through burned-grass patches, when every step will raise a cloud of dust, which gets into one's mouth and eyes and makes one black all over. The perspiration caused by the heat and exercise makes one sticky and hot, and I think more perceptible to the scent of wary game, than when cool and dry.

The most successful hunters are the men who can keep it up longest, for it is a case of "dogged does it." Such men are not always brilliant shots, but they are calculating and cool, and make the best of their chances by not firing uncertain shots. To-day the odds are against hunters, as the animals are getting warier, and the limit allowed on the licence makes care and selection more essential. The only advantage the hunter has nowadays is the wonderful accuracy and killing power of his weapon.

Selous once wrote to me that had he possessed a .303, .275 or .256 when he hunted Elephants for a living, he would have bagged thrice the number he did.

A TRIP AFTER ELEPHANT IN NORTHERN RHODESIA

Since the story of an actual trip after Elephant is more likely to carry conviction than a mass of hints culled from long and bitter experience, I give below the outline of such a hunt.

This hunt took place some years ago and conditions may have changed. The motor car may now carry the hunter many stages on his early way. My old haunts may have been swallowed up in the advancing tide of civilization. But the actual hunting remains the same, despite new fields of venture, and the whirl of a mechanical age, which drives deeper every year into the unknown spaces.

The same elements of luck and chance predominate, the same mistakes occur, and to the keen hunter the same will-o'-the-wisp—called Hope—still beckons forward, whispering of prizes undreamt of in the lap of Fate.

By the courtesy of the Field Press, Ltd., I give the résumé of a trip already published by them in my *Hunting Trips in Northern Rhodesia*. Ancient history, perhaps, but where I began to learn the game.

It was in late September that I left Fort Jameson, in North-eastern Rhodesia, for the country lying under the Muchinga range, which runs roughly north and south on the west side of the Loangwa River. I had heard that Elephants were numerous there, besides much other game, so I looked forward to an interesting trip.

At that time all the country bordering both sides of the Loangwa was noted for its abundance of game, and I doubt whether a better country for game could have been found in Africa in those days.

Many streams flowed into the Loangwa, which is a large river in the rains, but in the hot season many of its tributaries dry up, so that it can be forded in the shallow stretches. The Loangwa runs south, and near its confluence with the great Zambezi, are the stations of Zumbo in Portuguese and Feira in British territory.

Early in October I left Nawalia and reached Kamzembe's village. Here I was lucky enough to engage one of the most expert Elephant trackers I have ever met.

Kamzembe's village is sixteen miles from Nawalia, and here I began to notice Tsetse flies in abundance. I had a touch of fever next day, but I went out and shot three Puku, so as to collect meat to take to my Elephant camp.

Having moved camp on a few miles, I was off at last, early one morning, to look for Elephants. These early morning tramps in the cool of the morning are very pleasant, and this is the best time to see game in the open.

Having crossed the Nyamazi stream we took a line parallel to the water to cut the spoor of any Elephants that had drunk there during the night. We saw many well-used Elephant paths with fairly recent spoor, but none quite fresh enough to be worth following.

At last, after about two hours' walking, we came on the tracks of a good bull, which we at once followed. Soon we found that he had been joined by two others. After a time the spoor left the bush and took us into a huge unburned dambo, or open grassy valley, the grass being a good twelve feet high in many places. It was not hard to follow except that the down-trodden stems brought the pace down considerably.

Then we found fresh droppings, which was a sign that we were closing up. This is perhaps the most exciting moment when after Elephant, for the anticipation of shortly viewing the game, and wondering what the tusks are like, always produces a thrill.

A little further and we suddenly came on the Elephants standing in a slightly more open space. Their sterns were towards us, and as far as I could make out they were two bulls and a cow.

They were rocking about with a fore and aft action, and on testing the wind with my flour bag I found it was right for us. The largest animal was in the middle and they were all jammed together, so it was difficult to see what their tusks were like. Up to that time I had not shot many Elephants, and the best plan would have been to go on testing the wind, and to work round to the lee side, but there is often a hitch somewhere.

It came from the young bull on the left, who must have become con-

scious of threatening danger, for he turned his head round. There was only twenty yards or less between us, so instead of waiting, as I should have done, I fired at his earhole and he collapsed at once, shot in the brain.

I was using a single .303 which was apt to jam, so I seized a heavy double ten-bore, and gave the big one two shots as he began to move off. The bullets told loudly on his shoulder, and I saw the dust fly off his hide to each shot. These wounds did not impede him at all, for he ran away with the other and soon disappeared in the long grass. After seeing that the fallen Elephant was dead we spooed the wounded beast for miles, but never got him, although I heard afterwards he had been found and his fine tusks taken to a government station.

It is an extraordinary fact that the best bull in any herd, large or small, almost invariably offers the worst chance when they are located, and I have sometimes wondered if this is purposely done by the old stagers, or whether it is just bad luck for the hunter.

On my way back to camp I shot a nice Puku ram with horns of 18 inches. There was no fear now of disturbing Elephants, the damage had been done for that day.

I was still rather weak from fever, but next morning went out to try my luck again, for I was still sore at losing the big bull. I sent men out to make inquiries and to ask if any vultures had been seen dropping to meat, but could not get any definite information, so resigned all hope of seeing his tusks again.

We took a line westward with the Muchinga range showing far off. It was a beautiful morning with the dew glistening on the stems of the grass. I suppose we had been trudging along for less than an hour when one of the men snapped his fingers and pointed to an object which looked like a big dark-coloured rock about three hundred yards away. Then there was a succession of whispers and exhortations to shoot and that he was really a big one. I thought so too, for I had caught a glimpse of his right tusk, which projected about four feet from his lips and was also fairly thick. The first thing I noticed was that the Elephant appeared nervy, and the second that the timber appeared very small and sparse, with no good stalking cover. It was useless trying to shoot at three hundred yards, so I told the men to sit down and wait till called for. Then my tracker and I hurriedly tested the wind, so as to come up slightly from behind. By the time I had got within seventy yards the bull had sheered round and looked on the point of bolting, so I knew it was now or never, though I longed to be forty yards nearer.

I was using my .303 for the brain shot in preference to the heavy ten-bore, with its noise and lack of penetration. Resting my rifle against a tree I aimed for his brain and fired. The bullet hit his head with a crack and the Elephant remained erect, so I knew I had missed his brain. By the time I had reloaded the Elephant was moving off, looking slightly dazed, but going strong. I fired at his shoulder and heard the bullet tell. He stumbled, but carried on and then began to slow down. After swaying about he suddenly sank to his knees and soon died. The tusks weighed 56½ and 52½ pounds after they had dried.

The finding of this good Elephant without any spooing was a stroke of good luck, so I shall now relate an incident of the reverse, merely to prove the uncertainty of hunting.

It was many days before we found another good Elephant. They seemed to have left the neighbourhood, but I shot a Rhino one day and other game, including a very good Kudu.

I changed camp after that to a village nearer the mountains, so as to get into unshot country.

One morning with my men I found the spoor of a good bull Elephant, who was travelling by himself and not hurrying much, judging by the number of times he stopped to feed. We found his tracks about 7 a.m. and spoor him until 3 p.m.

Some of the grass had been burnt in the fires, and the fine dust not only blackened but choked us and added to our intense thirst, for powdery ash is of a salty flavour.

We began to find fresh droppings as we reached a long wooded ridge which had missed the fires. The grass was the colour of straw and some of the smaller undergrowth had leaves, which gave us cover.

Suddenly about eighty yards ahead I saw a high branch being wrenched off a tree and the sinuous trunk of the Elephant appeared just afterwards, as he went for another. There was hardly a breath of air stirring, for I kept wetting a finger to test it.

We got within a few paces of the bull and stopped behind a big leafy bush, so as to see his tusks. It was almost impossible to see more than the Elephant's back, so I was just thinking of moving aside a little, when the tracker put his hand on my shoulder and whispered: "He is coming, master."

This was more than I had expected, so I stayed where I was with my tracker just behind me. Then through a small gap I saw him arrive just behind my bush, and he began feeling about with his trunk, the point of which appeared just over our heads. Something had to be done and that quickly, so catching a glimpse of his red, bleary eye through a hole in the bush, I fired at it, wondering what would happen. The result was better than I expected, for instead of coming forward and crushing us like pancakes, the animal reeled backwards on his haunches, but did not fall completely.

Just at that moment there was a great rush towards us of a lot of Elephants from our right side, and apparently a similar stampede was taking place on the left, as we heard small trees going down. I caught sight of some of these and saw a good bull among them, which was at the tail of the lot. Without a doubt this would have been my bull if my bullet had got up the eye orifice to the brain, which it had failed to do.

These details all took place in a few seconds, and by this time the Elephants on the right were crossing the ridge to join the Elephants on the left. Suddenly, an Elephant, whose size or sex I had no time to notice, nearly came through our bush, in fact it scraped through one side of it, and I pointed the .303 at its shoulder and fired, and it went on. In a short time the avalanche of Elephants ceased and we had time to steady up and look round.

The first thing we did was to examine the other side of the bush where the big bull had been. In reeling backwards he had made great ruts in the ground, but there was not a speck of blood, which I did not expect from a head shot. Then we took the spoor of the Elephant which had nearly run us down, and I immediately noticed the tracks were either

those of a small bull or a cow. The tracker was a little excited and was running ahead when I saw him stop behind a leafy bush and beckon to me. When I reached him and looked through the bush I saw an Elephant standing listening. The earhole was visible, so I fired at it and the animal came down with a crash, within a few paces of us.

After reloading, my disgust may be imagined, when I examined the animal and found it was a big cow, the animal which had nearly run us down. *

This account of my most unlucky day after Elephants shows the novice how easy it is to make mistakes, which, however, are often the result more of bad luck than bad management.

The only way to prevent such a blunder would be to resolve only to follow lone bulls, but as I have shown, these often join a herd. In such a case one cannot expect the hunter to stop and turn back to camp, so he naturally goes on and may have bad luck, such as I have described.

Both cows and the young herd bulls are much more inclined to be nasty than are the single old stagers, for these aged Elephants have usually had many narrow escapes, and hardly any of them fail to have bullets in their anatomy, which must have caused them pain, for Elephants are extremely nervy and sensitive animals. Therefore age and sad experience has taught them to be wary and they are much less likely to charge than the young animals of both sexes, which have not previously been hurt or frightened.

THICK-SKINNED DANGEROUS GAME (Continued)

CHAPTER SIX

A RECORD ELEPHANT IN THE EASTERN CONGO

By MAJOR P. H. G. POWELL-COTTON

THROUGH the friendly courtesy of Sir Constantine Phipps, exceptionally attractive facilities once came my way for a hunting trip through the Eastern Congo.

As time was precious, it was important to insure the arrival of the camp kit at Lado, on the White Nile, with as little delay as possible, and parcel post proved quicker than any other method.

True, there was no recognized postal route, but once the interest of the Post Office Authorities of London, Egypt and the Sudan was enlisted, all difficulties were overcome with infinite patience and goodwill, and no fewer than 367 parcels, weighing over $1\frac{3}{4}$ tons, were safely delivered. Only the tent and cartridges were excluded.

The purpose of this trip was twofold: I was anxious in the first place to discover whether the Northern White Rhinoceros still existed, for at that moment it was only known to science by a single specimen brought home a decade before by Major A. Gibbons, and I also wished to secure the skin of two Elephants approaching as nearly as possible to twelve feet in height, one for the Natural History Museum in London, and a second for the Tervueren, near Brussels.

Five months of hard work in the Lado Enclave were rewarded by several fine specimens of the Northern White Rhinoceros, including the type *Rhinoceros simus cottoni*, which was accepted by the Natural History Museum.

In the meantime I was also on the quest of a big bull Elephant, and it was the Northern Enclave that accorded me the first opportunity.

Camp was pitched on the fringe of a swampy patch along the White Nile, in a glade, amidst dense thorn bush, and a few hundred yards away lay a reedy pool where Elephants were accustomed to drink.

The cook, an æsthetically minded man, had built for himself a bower of leafy branches to shade his daily operations from the sun and shelter his slumbers from the moonlight.

In the early hours of the night he burst into my tent in such manifest agitation, that it was difficult to grasp his trouble. It appeared that he had been rudely awakened by an Elephant feeding from his bower, and equally rudely I cut his incoherent story short, seized the ready loaded .400 from the head of the bed, thrust my feet into slippers, and rushed out in pyjamas.

The dim forms of a small herd of Elephants were just vanishing into a thorn thicket, which was inhospitable going, even for a man more suitably clad than I.

The jungle that night accorded me no coveted Elephant skin, but claimed a good deal of my own, and frayed my garments to something near a fringe.

Not many nights later, however, before the tropic dark had been dispersed by the moon, a herd of Elephants was heard splashing and drinking in the waters of the pool, and then came a solitary beast. They all landed on our side and fed quietly close to camp. Two hours later, when the moon had cast a film of pale radiance over the grassy plain, its flat-topped thorns and bush, I moved quietly down to the edge of the pool and for some three-quarters of an hour kept vigil over its pewter depths. Then with startling suddenness I realized we were not alone; a solitary Elephant was pacing slowly and with incredible silence along the opposite shore, his great bulk looming huge in the moonlight. When he began to drink and bathe, sluicing his sides with glistening water from a trunk like a flexible hose, I crept towards him and fired. Ponderously he turned away and was absorbed like a mighty shadow into the protecting if thorny sanctuary of the dense bush, which defied us to follow; so reluctantly we had to abandon our beast until early dawn, when we secured him within less than half an hour.

To my relief the work of preserving was successful, for although I had been the first to dry and bring home in good condition the complete skin of a five-horned bull Giraffe, this was my first attempt at a whole Elephant, and the dampness of the region made it a much more exacting and anxious task than it would have been in a climate such as the dry season of Southern Africa.

The size of this animal, however, did not altogether realize my ambitions though it proved a fine specimen when mounted for the Edinburgh Museum, nor did five subsequent months of hunting reveal anything near the ideal.

Wadelai I regarded as the last point in the journey from which a complete Elephant skin could be shipped home with any hope of success, and it was not until we came within two marches of that fateful spot that fortune at last gave me my chance of a really big beast.

It was at eleven o'clock in the morning, when the day was already hot, that news was brought to camp of a solitary bull.

For two hours the men and I followed our guide through a glorious country of undulating and wooded grass plain, and at last we came on our Elephant at his midday siesta. He was standing in a close belt of timber lazily flicking the flies from his flanks by means of a gathered branch, and with a certain difficulty through the foliage we traced the tall outline of an Elephant whose tusks looked massive.

The brain shot seemed to offer the best chance among the trees, so I fired both barrels of the .400 in rapid succession, as near as could be calculated between the right ear and eye, but with no apparent effect.

The second rifle aimed at the heart brought the beast from his cover, moving very deliberately, so that I was able to run round him and put in two more shots at his left shoulder, which rolled him over on that side.

He was a great gaunt animal as big as anticipated, but with only a single tusk. His height, measured with all the accuracy I could command, was 11 feet 6½ inches, while half the girth behind the shoulder as he lay on the ground was 7 feet 5 inches; the length between the eyes to the root

of the tail 15 feet 5 inches, the tail itself 4 feet 10 inches, and the circumference of the forefoot 5 feet 5½ inches.

The tusk was 7 feet 6½ inches by 20½ inches in circumference and weighed 114 pounds. Not till we had cut into the skull did we find the broken base of the left tusk, which was 2 pounds 13¼ ounces in weight.

The skin was removed in three pieces, the two sides and the scalp, to the scornful amusement of my men, who had no use for these untraditional and therefore ludicrous exertions.

Excited, chattering bands of them, seated in the grass thinning down the hide, had to be closely watched and kept to the work; with much difficulty, transport was arranged, and thanks to the help of the late Mr. Fowler, Kampala on Lake Victoria was reached in excellent time.

Here, however, the skin was retained by the Uganda Customs Official to deteriorate throughout the rainy season, in spite of the fact that it was accompanied by a certificate of origin. The result was that when at length it did arrive home, it was considered unfit to mount for the Natural History Museum. But on this occasion the ill wind blew to my definite advantage, for when eventually the skin reached the late Mr. Rowland Ward with instructions to mount the forepart, he was aghast at the proposal. Never had he seen such a fine specimen, he protested, and it must only be set up whole.

Financially it was not a happy moment for me, nor had I built the jungle case in my museum large enough to accommodate a whole Elephant, but the skin when relaxed proved to be in a better state than anticipated, and with extraordinary generosity Mr. Rowland Ward offered to set up the whole animal at the estimate for the forepart alone.

My gratitude has never ceased for his enthusiastic help and encouragement, nor have I ever regretted the necessity of pulling down two walls to admit to my museum the tallest Elephant yet set up. Here it may now be seen with an 8 foot 6 inch cow beside it as a contrast, and the bones of the foreleg saved as proof of height are also on view, as mounted by Mr. Rowland Ward. They measure 10 feet 9½ inches, the humerus being 3 feet 8 inches, i.e. 3·147 of the total height.

As soon as all the trophies were dispatched from Wadelai, the safari filed on through Mahagi to Irumu, over the splendid plateau of rolling grass hills that form the watershed between the Nile and the Congo basins. It was now the month of June. In almost every valley there was melody from the rippling voice of a little stream, singing its way between banks fringed with timber.

Much of the country was uninhabited, and great herds of Elephant were wandering at will, while the plateau teemed with a great variety of game. In the evening when the beasts came out to drink and feed, the grass stirred and rustled softly in all directions as the Antelope among it sped away for safety at one's approach.

Three days out from Malagi at Kaba-Kaba, we left camp one morning about 6.30, and shortly afterwards wounded an unusually large male Bushbuck, reddish in colour with a few white markings, which was later named by Professor Matschie *Tragelaphus dianae*.

Only after a four hours' heated chase over hill and dale through dusty grass did we make sure of it, and then as we regained the path a couple of natives on the outlook for us, reported that two large Elephants had

recently crossed the footpath and were then close by. Hot, dirty and incredulous as one grows over a native's estimate of "recent" and "close" I was reluctant to respond. Where was the sun when the animals were on the path, I asked, and they pointed to the sky. If their indication was correct it could only have been a very short time before, and the gun-bearer, after weighing chances with the men, begged me to go in search.*

A perfunctory circuit of some two hundred yards from the spot disclosed no sign of life, and I turned towards camp, but again my disinclination for the trail was broken down by the gun-bearer's eager entreaty.

Not a hundred yards further on, two separate little grassy hilltops came into view, and with almost theatrical effect a solitary Elephant stood posed on each, like a dusky weathered haystack against a deep blue sky. The grass was about thigh high, and there was neither tree nor bush placed conveniently for cover. The binoculars revealed that the nearest of the two beasts had but one tusk; the other Elephant appeared to carry heavy ivory, but only the bases of the tusks were visible.

To come within range of him we had to cross below the hill of the single-tusker, who would surely give the warning if he detected us. Luck, however, was with us on that painfully anxious stalk, during which four other Elephants showed up, standing drowsily below us in a little wooded valley.

Our beast remained motionless, head to wind, as very slowly I crept up behind him. At a distance of about eighty yards, just when I was moving out to my right, he suddenly raised his head, and the sun shone on two of the most magnificent tusks my eyes had ever seen.

Two rapid shots I fired for the head, another for the ear. The great creature swung round and came imperiously forward, ears flapping, trunk waving, but his gait was markedly unsteady.

Three successive shots at the forehead still failed to drop him, though he turned heavily aside, and it took two more to bring him down. He was not a particularly tall beast, and lay too awkwardly askew on his right side for me to measure his height with any certainty. Half his girth was 7 feet 11 inches: the ear measured 76 inches in length by 44½ inches in breadth, and the forefoot 62½ inches in circumference.

About the immense size of the tusks there was no error: the left measured 9 feet, with a circumference of 25 inches and weighed 198 pounds, while the right was 8 feet 11 inches, circumference 23¾, and weight 174. It was a prize little deserved from the point of view of markmanship for neither before nor since has my rifle seemed so erratic. Buck fever alone can be pleaded in view of those dazzling white tusks that gleamed intoxicatingly in the sunshine.

But there was little time for musing, for the firing had startled the four Elephants in the valley, and driven them to the hilltop which the single-tusker had meanwhile vacated. In the long grass it was difficult to distinguish their ivory, but from the top of an ant-hill and the back of a porter I caught a glimpse of one pair of curved tusks, too fine to be resisted, so with a few hasty instructions to the men, I was off again on what proved to be a provoking chase.

Disturbed by the arrival of some porters the beasts drew me on over three ridges for nearly two hours, till they halted in a narrow rockstrewn valley where six others were feeding, two of them to my surprise tuskless, though fair-sized bulls.

Another hour passed before I had a chance of firing at the coveted beast. As the rifle rang out without warning a tuskless bull plunged violently forward and then ran amok, ears out and trunk extended. He charged madly to and fro like a beast bewitched, among the boulders, casting up a shower of grass and stones. There was a slight breeze blowing and probably fitful whiffs of man-tainted air which reached him through clefts in the rocks coupled with the sound of the shot had demoralized him, as he tried to locate us, blundering madly this way and that.

The panic spread and for some time frustrated any attempt to get a clear view and aim at my special quarry, but when at length success came, he proved to be a good specimen with tusks of $97\frac{1}{2}$ and 92 pounds.

In the museum at my home it is my good fortune to be able to show the record tusks shot by a white man, and the tallest Elephant yet brought out of Africa, but any vainglory is soon brought down to earth when I am asked for the story that goes with each, for it is a record, not of good, but of exceedingly bad shooting.

THICK-SKINNED DANGEROUS GAME (Continued)

CHAPTER SEVEN

RHINOCEROS

By A. C. KNOLLYS AND D. D. LYELL

THERE are two distinct species of this animal, the "White" (*Rhinoceros simus*), and the "Black" (*Rhinoceros bicornis*), but this nomenclature is misleading, as actually there is very little difference in the colour. The chief difference lies in that the White is slightly the larger beast, subsists mainly upon grass and has a wide square mouth. The White species is reputed to be far less pugnacious than his half-brother and the range of his habitat is much more local. The White Rhino is now a great rarity and is strictly preserved wherever he exists.

Black Rhinoceros.—Among the big game of Africa the Black Rhino is still one of the most widely distributed races. From Abyssinia and the Sudan in the north to south-east of the Zambezi in the south, it stretches across westward wherever the country is suitable, from Northern Nigeria and the Cameroons down to Angola. At the present time it is probably most numerous in Kenya Colony in the neighbourhood of Voi and Tsavo and in parts of Tanganyika.

In Nyasaland and Northern Rhodesia it has always been a rather shy animal, keeping away from the haunts of man; consequently in those countries it can usually be obtained only by following its spoor.

The Black Rhino feeds mostly on thorns, and like all game, especially in the hot dry season, he drinks nightly, so it is not difficult to pick up his spoor and follow him to his resting place which, in Nyasaland and Northern Rhodesia, is usually in the hills. Unlike the Elephant, which generally sleeps standing, the Rhino lies down, although I have seen one asleep when on his legs.

As he makes for his daytime haunts he feeds as he goes along, and it is wonderful how he manages to get nutriment out of the hard and dry thorns he consumes, for although I am sure I have seen grass in his droppings he is certainly not a grazing animal by habit. The natives are certainly as much afraid of him as they are of the Elephant, although in the opinion of most hunters he is classed as the least dangerous of all the larger game. He is easy to kill with a small bore, with, of course, solid bullets; and the best place to hit him is low through the shoulder. A shot in the centre of his short neck is quite effectual, or if he is standing half turned away, low behind the ear will brain him. As a rule he dies quickly; but when incorrectly hit he will take quite a number of bullets to finish him, which applies to all game of any species.

A point to be remembered with all game which has to be spooed up,

is, that a very early start is essential, so the hunter should be away as the sun tips the horizon. This is even of importance when one goes out chance hunting, for early in the morning Antelopes, and game such as Buffaloes will be found in the open dambos (valleys).

The sun begins to get stronger as time goes on, and about 3 p.m. is the hottest time. Then all game will be in cover for the shade, except purely game of the plains, which will often go to clumps of trees, ant-hills or high grass to get shelter from the sun.

In the dry season, often called the cold season in South Central Africa, the temperature can be quite nippy at dawn, and for an hour or so afterwards, so an old tweed jacket is quite useful. I always had the heel of my rifles finished in wood and no iron heelplate, which makes one's hands bitterly cold at such an hour and becomes burning hot in the sun.

The main point in hunting Rhino is to keep the wind right, for he is a keen-scented animal. His eyesight and hearing are bad, and he is an excitable beast, which accounts for his strange behaviour in East Africa where he sometimes charges through a line of porters. He does this to get above the wind for he dislikes the smell of human beings, and his behaviour on such occasions is not due to ferocity, but to fear, and his dislike of the taint of mankind. Of all the larger game he keeps furthest away from the habitations of man. In East Africa instead of being a plains-loving animal as formerly, constant persecution is, I believe, making him more of a bush-dweller. In this way he may succeed in his struggle for survival. A good average horn will be about 20 inches on the front curve in South Central Africa, and one of 28 inches would, nowadays, be quite good in Kenya.

The probable reasons for the very different opinions as to the risks of shooting Rhino is that the nature of the beast itself differs according to locality. In the Baringo district, for example, I found them particularly pugnacious, while in French Equatorial Africa they would try to beat a retreat even when startled by sudden approach. When wounded the beast will often revolve in a circle before dashing madly away or dropping dead. Should it bear down on the sportsman it is wiser to try and turn it by a shot, for if it catches sight of a flying figure it will often take up the chase like a terrier after a rat.

A full-grown male stands upwards of five feet at the shoulder and weighs over a ton. It is almost incredible how an animal of that size can manage to get any nutriment from the dry hard thorns which comprise its food, and which account for its prevalence in the dense thorn bush of Kenya.

It is local in its habits and does not wander very far from one place. While water is apparently not a daily necessity it will drink every day—or rather by night—if possible, and will be therefore found usually in the vicinity of a river or water hole.

The Black Rhino is piglike both mentally and physically and little or no provocation is required to make it take the offensive. On at least one occasion in the earlier days of the Kenya-Uganda railway it charged an approaching train, meeting it obliquely near the front portion. As might be supposed the train got the better of the encounter and knocked the Rhino over. Nothing daunted, however, the enraged beast got on to his legs and made a second attack, with the same result, when, thoroughly disgruntled, he limped off into the bush.



BLACK RHINOCEROS

Plates 16—17

Top. THE BLACK CIRCLES INDICATE THE NECK AND HEART SHOTS.

Bottom. A BLACK RHINO IN KENYA. NOTE THE TICK BIRDS.

It is the unexpectedness of the attack, invariably made at close quarters, which makes it so deadly. As, however, its range of eyesight, like that of an Elephant, is limited to from thirty to forty yards it is generally fairly easy to avoid these attacks, provided the sportsman keeps his head, and is agile.

The moment a Rhino gets your wind its head and tail go up to the accompaniment of a loud grunting snort. For its bulk it is extraordinarily quick on its feet and covers the ground at a great speed.

A cow with a calf is an exceptionally dangerous animal, and in approaching a Rhino the utmost care should be taken to spot it before it discovers you, a difficult matter in the dense country in which it is usually found.

It is quite a habit for a Rhino when seeking its daytime resting place to turn back parallel and to leeward of its trail before it lies down, and the hunter must always be on the alert for such a contingency when following its spoor.

Black Rhino are as fond as the White species of wallowing in mud or rolling in dust, which gives their hides a variety of shades, from grey to red. Like the White race they resort to one spot to drop their dung and then kick it about, so that the bushes near are sprinkled with it.

When on the move, the precedence of a family party reverses the order accepted by the White Rhino. With the Black variety the bull leads, the cow follows, and the calf brings up the rear.

BLACK RHINOCEROS HUNTING

By MAJOR P. H. G. POWELL-COTTON

In the Baringo district Rhino were both numerous and aggressive, and the tale is told that before the days of the railway one of them charged a line of prisoners laden with the baggage of an official. The unfortunate men, who were chained by the neck, were unable to take flight, and several of them met their death.

When I was in that part of the country many years ago it was no unusual thing for the safari to cast down their loads and scatter in all directions as a beast, resentful of the scent of man, bore down on them unawares, snorting its disgust.

This was provoking enough when one still had the right to shoot, but after securing the two Rhino permitted on his licence, a sportsman had no other course but ignominiously to take to his heels with the men who, quite unmoved by any explanation of government prohibition, smiled and marked him down as a faint-hearted hunter.

With my second Rhino we had a lively encounter. In the first glow of dawn we had set out from camp, east of the lake, in pursuit of Giraffe, and soon picked up some fresh tracks that led us over a low hill. From its brow a fine view opened out below us, across a wide plain teeming with herds of game—Zebra, Eland, Oryx, Granti, Ostrich, Rhino and Giraffe, feeding or roaming at will over its fertile stretches of grassland.

On our homeward trail, after a day of disappointment, the men and I, hot and weary, were enjoying visions of the pleasant camp to which we

were returning, when abruptly our dream was dissipated by the sight of two Rhino standing in thin thorn some two hundred yards from our line of march. If we advanced they could not fail to get our wind, and to circle them meant a long detour, so when the glasses revealed that one had a good horn, I decided to try and secure it as the second Rhino of my permit, if possible.

Leaving men and mule behind me, I managed to move forward to within one hundred yards, although it was plain that the beasts were apprehensive, from their uneasy turnings this way and that. Aim was awkward through the thorn trees, and as my shot for the shoulder rang out, both Rhino simultaneously dashed in my direction, one rather wide, the other straight for me, blood and foam oozing from its lips, and spraying from its distended nostrils. The bullet had evidently struck the lungs. Another failed to stop it, and while I was beating a hurried retreat, reloading as I ran, a quiver of the ground and an infuriated snort close to my ear made me leap to one side. Swinging round I poured both barrels at the beast's shoulder at a distance of two or three yards, and swerving past me it transferred its interest to Bedoni, my gun-bearer, who had followed me and was now dodging behind some thorn trees. Deliberately the beast gave chase: the man flew for his life, doubling from side to side, while I sprang forward to try and divert its attention from his speeding figure.

To my consternation I then saw the second gun-bearer, a most erratic shot, raising his rifle, from which I knew Bedoni was quite as likely to get the bullet as the Rhino. My shout of protest was too late; the report rang out, but mercifully the shot went aground, while at the same moment Bedoni lost his footing and fell just in front of the beast which blundered onwards straight over his outstretched form. His teeth were chattering and his wrist was badly bruised by the animal's foot, but otherwise there was no sign of damage, and in a few moments we were steadied enough to look for our quarry lying motionless close by.

Nothing seemed to stir the quiet spirit of my old mule, a lover of the contemplative life, who was obviously far on the road to invulnerability. She was quietly standing close to the scene of the disturbance, just as I had left her, with a tolerant expression for all this human pother and agitation.

W H I T E R H I N O C E R O S

The term "White" first applied to Rhino by the Boers of South Africa, is misleading, for while the texture of the skin of *Rhinoceros simus* differs from that of the Black species, the colour of the hide is only a slightly lighter shade of slatey grey. The animal, however, is fond of bathing in mud or rolling in dust, from which it takes on any shade from a deep red to a light grey, that would appear whitish in a strong light.

When at rest the ponderous bulk of the beast may easily be mistaken for an ant-hill of the prevailing colour.

In South Africa, less than one hundred years ago, a traveller in Magaliesberg (North-west Transvaal), counted over eighty White Rhino in one day's march. Now, unfortunately, the sole survivors are said to be some half dozen specimens, which the Natal Government are endeavouring to protect.

The White Rhino is a grass feeder with a wide square mouth as its most distinctive feature, while the narrow-jawed Black type subsists on thorn twigs gathered with its pointed prehensile upper lip.

The White Rhino is only exceeded in bulk by the Elephant, and a fully adult bull standing 5 feet to 5 feet 6 inches would weigh well over a ton.

NORTHERN RHINOCEROS

(*Rhinoceros simus cottoni*)

For many years European Museums have possessed isolated examples of a square-based Rhinoceros horn said to have come from the north of the Zambezi, but the first definite proof of the beast's existence was a single skull from Lado, which found its way to America in 1900.

Nothing further was heard of the race until my own expedition of 1904-7, when I had the good fortune to bring home a series of skins and skeletons, from which the Northern White Rhino (*Rhinoceros simus cottoni*), was described as a type apart from the Southern, chiefly on the strength of distinctive differences in skull measurements.

The range of this Northern race extends from near Wadelai, on the left bank of the White Nile, northwards into the Bahr-el-Ghazal, and westwards into the Belgian Congo, and the French Colony of the Ubanghi-Chari.

The beasts are now strictly protected throughout, but, under exceptional circumstances, permission may be granted to shoot a single specimen.

At the time of my expedition in the Enclave, the Rhino were very local, and preferred to frequent the outskirts of marshy swamps, five of which existed between Kero and Wadelai on the White Nile. Here they were in the habit of feeding and drinking during the night, but before dawn broke they set out on a four or five hours' trek to thorn scrub, in which to lie up for the day. This habit was most regular in the vicinity of the Belgian posts, where parties of native hunters were often sent out to secure meat for the garrison.

As with Elephants, the older males often seek solitude or the company of one other male, for the greater part of the year, although at times a family party may be encountered with the calf leading the way, guided by the tip of its mother's horn, and the bull bringing up the rear. A Black Rhino family reverses the order of its going, for the bull takes the lead with the cow behind him, while the calf has to follow mother as best it can.

So low do they carry their heads that the front horn is frequently worn flat by friction on the ground, and this habit makes it extremely difficult to judge of the length of the horn.

The brain is so small and so well protected by the horns that a front shot is almost impossible. It is well to aim low behind the shoulder or in the middle of the neck, but when the beast is facing, and a shot cannot be placed inside the shoulder, an aim to break the upper part of the leg is advisable.

A peculiarity of both the White and Black varieties is the custom of resorting to the same spot day by day to deposit their dung, and these middens are a useful record to the hunter in search of fresh tracks.

The White Rhino of my experience does not charge on scent like the

Black, but it is nevertheless well to be wary, for now and then the beast will turn on the hunter with as much ferocity as its Black relation.

Many years ago I secured a good White Rhino bull at Lemasi, in the Lado Enclave, a country of thorn scrub interspersed with wide stretches of open grass, upon which the beasts cropped during the dark.

One April night the stillness was broken by the hungry grunting of a Lion close to camp, and in the early morning we set out in search of tracks. Suddenly we caught sight of a Rhino, stretched at ease, head from us, with a number of Rhinoceros birds moving about its back. To fire at a prostrate animal is unsatisfactory, but the question was how to bring the beast to its feet without disturbing the birds, which we knew would flit up and down the Rhino head at first sign of us, and screech loudly. Fearing that this alarm from its faithful little followers might put the Rhino to instant flight, I calculated the position of its heart as well as possible, and fired as he lay. Two more bullets failed to stop him, and he blundered away, leaving no trace of a blood trail. The men, however, were so certain the first bullet had gone home, that we kept up a three hours' steady pursuit, all through the burning heat of midday, till at last our quarry came in view, standing on guard under a thorn tree.

Two more shots sent him round the bush at a gallop; then he halted, caught a glimpse of us and made a deliberate charge down wind at me. An empty .400 is a bad card for an introduction, so I took to flight in my turn, slipping in a cartridge as I ran. Then a quick turn to place a solid nickel-clad bullet between nostril and horn made the beast swerve a little to thunder heavily past us out of sight. He had scattered us right and left as he charged in between us, hot and dishevelled as we were already by the chase, and now it took a moment or two to regain breath and self-possession.

An ant-hill rose some two hundred yards away, beside which I fancied the beast had halted for a moment. A very cautious approach revealed his unwieldy body lying inert at the far side, and we found that all the shots had met their mark. The square-based horn was unusually massive, and measured $28\frac{1}{4}$ inches in length.

It was 5.15 before skin and scalp were removed, and porters had arrived from camp, and as night would soon be falling, there was nothing for it but to leave a band of men to bivouac on the spot, while the rest of us tried with uncertainty to retrace the dim outline of the homeward path among the thorn scrub. It was raining slightly and the skies showed signs of impending storm. Suddenly Abdullah, my boy, who was leading, halted, pointed wildly in the gloom, and with a hurried word of warning, vanished from sight, or as it seemed to my startled senses, was transformed into a Rhino whose great bulk had lumbered out of the long grass close across my vision, and stood snorting indignation less than one hundred yards away.

The .400 was pressed into my hand from behind, but peer as I would it was impossible to clearly detach the animal from the surrounding blackness. Nor was I anxious to deal with a wounded Rhino at night, after the morning's agitations.

Motionless we stood, I finger on trigger, the men behind me, while the Rhino faced us, snorting at intervals. Then I slipped into the bush in the hope of making a detour to evade the beast, but it was too dark to pick

one's way through the long grass and scrub, and I had to turn and regain the track.

The next moment a dim shape once more loomed across it, but this time the beast pursued its way and was blotted out in the darkness.

At 9 p.m., wet through and weary, we were glad to reach the friendly shelter of camp, for the thunderstorm had gathered in intensity and the rain was sluicing along the trenches round the tent. Next day it took forty-four willing porters, each with a load of between fifty and sixty pounds of meat, bones, hide and horns on his head, and high hopes of supper in his heart, to transport the carcass of the shot Rhino to camp. The skin had been removed in three pieces, and circles of men squatting round each had to be constantly kept at the task of thinning, while others built a rough platform over charcoal fires. These were to be kept going day and night to hasten the drying, for it was the height of the rainy season, a trying period for such work. Rain frequently started in the night, and at the first patter of it on the tent one had to rush out in pyjamas and supervise the covering of the hides with waterproof sheets.

Daily the skins were removed from the platform and carefully folded then opened out again and replaced, in order to keep the hinges soft enough for subsequent packing.

This specimen has been set up whole by Messrs. Rowland Ward, and can now be seen at the Powell-Cotton Museum, Birchington.

THICK-SKINNED DANGEROUS GAME (Continued)

CHAPTER EIGHT

HIPPOPOTAMUS

By A. C. KNOLLYS

HIPPOPOTAMUS are found usually in considerable numbers, practically throughout Africa, wherever rivers or sheets of water of any size occur, and literally swarm in many parts of Lake Victoria and the Nile.

They are protected in certain areas but elsewhere are regarded as vermin, and there is no restriction as to the numbers which may be killed, nor is a game licence necessary for that purpose.

Under normal conditions Hippo cannot be included in the list of dangerous big game if very ordinary precautions are taken in their pursuit; these consist merely in never getting between the beast and deep water when hunting it from a boat, or between it and the water if it be tackled on land.

In the very few instances of which I have any knowledge of Hippo attacking human beings, either on water or land, it has invariably happened that the person attacked has interposed between the animal and deep water, or when on land, has cut off the Hippo from the water for which it was making. It is questionable in every case whether the assault was actually intentional or incidental to the victim happening to be in the path to the animal's objective. While I cannot vouch for it, my own impression is, that the Hippo, like the Elephant, is not blessed with very good sight.

Anyone so disposed can certainly get quite a thrill out of hunting Hippo on a moonlight night when it comes ashore to raid a native plantation, a practice of which it is exceedingly fond, but on such a venture every effort should be made to approach the beast from its landward side and not from the direction of the water. The moment it becomes alarmed it will dash, at an incredible speed for such an unwieldy-looking animal, straight for the water, and woe betide anyone who gets in its way!

The skin of the live animal is covered with a slimy substance similar to that to be found on a slug, and without doubt this is of considerable assistance to its rapid passage through bushes and undergrowth. When killed in the water it will lie submerged for a period of about four hours before coming up to float on the surface, and by then this slimy coating will have entirely disappeared.

A most interesting and amusing day's sport can be obtained shooting Hippo from a canoe on Lake Victoria, but unless the hunter fancies a ducking, with the consequent possible loss of valuable gear, the canoe and even the life of members of the party (it is unusual to find a native resident



Plates 18—19

THE HIPPOPOTAMUS

Top. THIS PHOTOGRAPH SHOWS A GOOD DEAL MORE OF THE HIPPO'S HEAD THAN ONE USUALLY HAS TO SHOOT AT. USUALLY ONLY THE EYES AND THE NOSTRILS ARE EXPOSED.

Bottom. YOUNG HIPPO PHOTOGRAPHED ASLEEP ON A RIVER BANK IN TANGANYIKA. AN UNCOMMON SIGHT.

on the mainland who can swim) he should bear in mind the advice to approach his quarry from its landward side. In my own experience and that of others I know a Hippo will never attempt to molest anyone who attacks it in this manner, in such event it will either at once submerge or make off at full speed along the surface for deeper water.

When hunted in the water the target it offers usually consists of the apex of the skull and the nostrils and a very accurate shot is required to hit the two or three inches of skull exposed to view. With care, however, the beast can be approached to within about fifty yards and the shot is not so difficult as it may sound.

Solid-nosed ammunition should invariably be used, and as that of even a very small calibre rifle will suffice, it is a waste of gun energy to employ a heavy rifle for the purpose if one of light bore is available. One rarely, however, comes across a light-bore double-barrelled weapon, and as the act of submerging, which almost immediately follows the discharge of the rifle, forces practically the whole of the beast's head out of the water, a second barrel, already aligned on the mark, makes very sure of a kill if the first shot has not been effective.

There is very little in the shape of an interesting trophy to be obtained from a Hippo, especially as it is ordinarily impossible to ascertain before it has been killed whether the teeth are of any size. Apart from these, no part of the beast is worth preserving, except possibly a foot, unless, of course, one is prepared to keep the complete head or skull, rather a tall order for the average sportsman.

The most interesting trophy of this animal I have ever seen, a unique specimen so far as I know, was procured from a beast shot in the Nile many years ago. One of the straight teeth in the upper jaw was missing. This resulted in the curved corresponding one in the lower jaw having nothing to grind against, and it had grown into more than a complete circle.

PART THREE

NORTH AFRICA

SHOOTING IN THE BARBARY STATES

By CAPT. M. W. HILTON SIMPSON

ALTHOUGH Morocco, Algeria and Tunis are scarcely likely to attract the sportsman who contemplates an elaborate expedition in search of big game, yet these countries contain several species of game animals, and they are so readily and quickly accessible from England that the man of limited leisure may well be tempted to take them into consideration when planning a short trip with his rifle.

A glance at the geography of North-west Africa will enable the reader to grasp the distribution of such species as exist there and help him to the selection of a hunting ground.

GEOGRAPHY

Throughout the Barbary States a series of mountain ranges run from the Atlantic coast in an east-north-easterly direction to the Gulf of Gabes on the eastern coast of Tunis; to the south of these ranges lies the great Sahara Desert.

In moving south in a direct line from the Mediterranean coast to the desert in Algeria, the traveller would cross successively, (1) a coastal belt of well watered, wooded hills; (2) a high plateau, under crops where rainfall admits of cultivation, but elsewhere a foretaste of the desert; (3) a chain of hills, whose southern slopes are barren and rocky, separating this plateau from (4) the great Sahara, stretching away to the south, but little above the level of the sea. Along its northern fringe the Algerian Sahara consists of plains of dry earth or of stones, the real sand dunes lying some 150 miles to the south.

DISTRIBUTION OF GAME ANIMALS

The Wild Boar of European race, *sus scrofa*, is very widely distributed in the coastal mountain belt, and on the wooded north slopes of the hills which fringe the desert.

The Leopard is still to be found among the wooded mountains, and a few specimens are annually shot. As elsewhere, he is an elusive beast, a definite expedition in search of which is likely to prove fruitless.

The Lion, formerly abundant in the wooded areas of Barbary, has been extinct for some years in Algeria and Tunis, though he may well exist in some of the remoter regions of Morocco.



Plates 20—21

NORTH AFRICAN GAME

Top. CUVIER'S OR ATLAS GAZELLE, MOROCCO, PROBABLY THE RAREST OF ALL THE GAZELLES.

Bottom. BARBARY SHEEP, THE ONLY WILD SHEEP FOUND IN AFRICA. HE LIVES IN STONY, ISOLATED HILLS AND IS ONE OF THE WILDEST SPECIES OF GAME.

The Caracal is rarely to be met with in the woodland country.

The Hyena; the striped variety (*hyena striata*) is very common among the hills bordering the Sahara.

The North African Red Deer (*cervus elaphus barbarus*), though rare, exists in the wooded hill country near the borders of Algeria and Tunis.

The Hartebeeste (*bubalis boselaphus*) has been said to exist in the interior of Algeria and Tunis; careful enquiries, however, in those countries have failed to reveal any trace of it to the present writer.

The Addax Antelope (*addax nasomaculatus*) must be sought for down in the great desert, for example around Ouargla, 100 miles south of the railhead at Touggourt, itself 150 miles to the south of Biskra in the Algerian Sahara; even from Ouargla a considerable journey would be necessary in order to find this beautiful Antelope.

Loder's Gazelle (*gazella leptoceros*), another native of the Sahara, inhabits dune country such as that around Oued Souf, near the border of Algeria and Tunis.

The Dorcas Gazelle (*gazella dorcas*) is very widely distributed in herds of from three to fifteen or twenty head (and sometimes more) over the desert areas of the plateau and in the Sahara.

Cuvier's Gazelle (*gazella cuvieri*) may be found in small parties, rarely exceeding seven head, upon the bare southern slopes of the hills bordering the Sahara. This animal is peculiar to the Barbary States.

The two last-named gazelles may be met with upon the same ground, while the latter encroaches upon the mountain home of the Barbary Sheep (*ovis lervia*), which animal, the prize of the hunter in Barbary, exists in fair numbers of small parties upon many, but by no means all, of the southern slopes of the barren rocky ranges overlooking the great desert.

The above, with the Addra Gazelle (*gazella dama mhor*), which is said to exist in southern Morocco, and the problematical Moroccan bear, complete the game list of the Barbary States, excluding such creatures as Jackals and Red Foxes, both of which are very numerous and widely distributed, the Barbary Ape from the coastal mountains, the Porcupine and a large number of small mammals as yet but imperfectly known.

CHOICE OF HUNTING GROUND

Of the animals enumerated above, the most likely to attract the sportsman who has limited time at his disposal are the Sheep and the Dorcas and Cuvier's Gazelles, for all three should be obtainable from one camp at the foot of the hills bordering the Sahara. Such a camp can be reached in one day's march from some such railway station in Eastern Algeria as El Kantara, where there is an excellent inn, or Niskra in which several hotels are to be found.

But the definite selection of the hills to be tried cannot be made in advance, for sheep move from one small range to another if disturbed, often travelling ten or twenty miles in their change of abode, so that only upon learning the latest reports from the sheep country, on arrival at his "base," can the sportsman choose the area in which to camp.

In this he must be guided by the advice of a local native shikari.

Stalking of both the Gazelles and the Sheep is difficult owing to the absence of cover in the desert and the rapidity with which the wind changes its direction upon the barren hills; the chances of success, therefore, are less than the number of animals which undoubtedly exist would suggest.

Once the present writer saw fifteen Sheep in the course of five consecutive days on the hills; he has seen up to twenty Dorcas in a single day, and up to ten or a dozen of Cuvier's Gazelle in the same space of time. On the other hand, he has occasionally spent a long day's hunting in the desert and foot-hills without seeing a beast even in the distance and, when in pursuit of Sheep, blank days have been at least as numerous as those upon which game has been sighted.

Should the Wild Boar be the quarry sought, there are many areas accessible from the railway, which runs east and west through Algeria and Tunis, in which *sus scrofa* may be driven from his coverts by beaters or, in some places, hunted with the aid of trained native dogs which pursue him and bring him to bay. A suitable region in which more or less comfortable hotel accommodation is available could be chosen upon the advice of an Algiers or Tunis tourist agency, but full enquiries should, of course, be made in advance of the local inn-keeper in the area suggested. The habitat of the boar in Algeria and Tunis is too mountainous for "pig-sticking." A very few days spent in either driving Pigs or hunting them with dogs should certainly result in the bagging of a few specimens, whose tushes, however, will not prove remarkable for their length.

The other game animals of Algeria, as will have been seen from the list given above, must be sought too far afield to attract the sportsman who can devote but a short time to his trip, or, as in the case of the Red Deer, are so scarce that they may not even be seen in the course of, say, a fortnight on the shooting ground.

The traveller who intends to hunt such animals should get into touch with the French officers or officials in charge of the districts in which they are to be sought, in order to obtain local information as to their haunts. The present writer has invariably found the French authorities to be most courteous in their treatment of the wandering sportsman and ready to do all in their power to assist him.

SHIKARIS AND SERVANTS

These must be engaged at the "base" near the shooting grounds and on no account taken up-country from a tourist resort on the coast, a mistake not infrequently made.

Good shikaris are rare, though many worthless ones offer themselves to the sportsman.

A good one, chosen with the advice of a European resident in the district, will be found to know intimately the country and its game, to possess some skill in skinning, and to understand the art of spying with glasses. He would, however, speak little or no French.

The writer finds that for a week or so in camp the following servants are amply sufficient—one shikari (for each sportsman), one muleteer with his animal to accompany each sportsman and bring in the game

shot; one cook; and one "cook's mate" to fetch water and collect fuel. A French-speaking native can always be found at the "base" to combine the duties of interpreter and cook.

For a longer stay in camp an additional man and mule are useful to bring supplies when required from the "base."

TRANSPORT

The pack animal used in the hills is the mule, in the desert the camel; the latter being the more economical where he can be employed. For economy's sake animals used to convey a traveller to a camp in which he means to spend some days should be sent back to the "base" on arrival and summoned again when it is desired to move. The traveller himself will find a mule the most useful mount.

CAMP EQUIPMENT

This can be hired at most tourist resorts, but, owing to the number of people who require it for "camping tours" in the desert, the sportsman should bespeak it well in advance through the hotel at which he intends to stay. Should he take his own kit with him from England he will find some such simple tent as a "Whymper" (a double roof is unnecessary), a sleeping valise with plenty of blankets, for nights are cold in winter even in the desert, a folding chair, and a very large water-bottle (or two ordinary Army water-bottles) should be all that he need take out, for cooking utensils, etc., can be obtained in any town which has a French quarter.

STORES, ETC.

Stores can be obtained in Algiers, Tunis, Biskra and other centres in sufficient variety to suit any ordinary traveller, and some hotel keepers make complete provisioning arrangements for those undertaking camping expeditions. The traveller must be well supplied with stores since he cannot hope to rely entirely upon his rifle for his meat.

In most shooting grounds of the desert and the Sheep hills are to be found camps of nomads whence sheep, poultry, eggs and goat's milk can often be obtained. The native servants should be paid a wage which allows them to cater for themselves.

Water.—Portable barrels should be obtained at the "base" for carrying water in the event of camping at some little distance from a spring in the hills or to supply the party between the wells during a desert journey. *Spring* water in the hills is usually safe to drink, but that of the desert wells should be regarded with the greatest suspicion, even though it may be drunk by the natives.

Clothing.—Even though the middle of the day be warm, necessitating the use of a shady felt hat, mornings and evenings are often cold in the desert in winter and almost invariably so in the hills. Warm clothing, therefore, is essential. Its colour should be a very light shade of khaki.

Rubber or rope-soled footgear, or an extra rubber sole sewn on to a rope one, is undoubtedly the best for use in the desert or on the dry rocks of the Sheep hills.

Maps.—Excellent maps, the work of the French General Staff, can be obtained in the large towns on the coast.

For Algeria and Tunis, north of the desert, the one to a scale of 1 : 200,000 is first class, while for the Sahara, a map of 1 : 800,000 will be found excellent.

Licences.—In Algeria a shooting licence can be obtained from the Prefecture at Algiers, Constantine or Oran. A special permit is required to shoot the Red Deer. Rifles may be imported, but to bring ammunition into the country a permit from the French authorities is necessary. Rifle ammunition of good quality cannot be obtained in North Africa.

Sportsmen intending to visit Morocco should seek the advice of the French authorities in that country before commencing their preparations, for some areas are as yet unsettled.

Seasons.—Some animals, *e.g.* Pig and Leopard, may be shot at all times. But for others, such as Sheep and Gazelle (of which females are protected), the shooting season is fixed annually—during the summer—by the French. The exact dates must be ascertained each year, but November, December is the usual season.

Expenses in connection with shooting trips have, like everything else, increased considerably since the War, but prices are so variable at present that no useful advice can be offered with regard to them. The cost of everything required must be definitely stipulated in advance.



Plates 22—25

Top Left. ADDRA GAZELLE.
Top Right. ADDAX.
Bottom Left. WHITE ORYX.
Bottom Right. GEMSBUCK.

PART FOUR

SUDAN

CHAPTER ONE

GENERAL

By MAJOR H. C. MAYDON

THE best shooting districts of the Sudan divide themselves naturally into four areas.

(1) The Libyan Desert west of Dongola for Addax, White Oryx, Barbary Sheep, Addra, Dorcas, and Red-fronted Gazelle, and, with extreme luck, desert Lion.

(2) The Red Sea Hills, which are dealt with elsewhere, for Nubian Ibex and Kudu and various smaller game.

(3) The Blue Nile.

(4) The White Nile for Giant Eland, Nile Lechwe, White-eared Kob, Buffalo, Rhino, Elephant, Lion, Leopard, Bushbuck, Reedbuck, Tiang, etc.

Of these, Nos. (1), (2), and (4) are the best, and yield each their "starred" heads. I may be prejudiced, but I think that the Addax shoot is the most pleasant and possibly most exciting shoot in Africa. In winter the climate is perfect. It is not a Cook's tour, is seldom done, and is well off the beaten track. Its three special quarries, Addax, White Oryx, and Barbary Sheep, are real rarities in collections. The country traversed is wildly interesting, at least to those who love deserts and the feel of mystery in the air.

The Red Sea Hills shoot is in a pleasant climate, in attractive surroundings, and is mountain shooting. But its game is scarce and of few varieties. It is more the initial stage to the far bigger expedition through Abyssinia.

The White Nile shoot is, to me, the least pleasant of all owing to its bad climate, its unattractive country—too typical of Central Africa—and an uneasy feeling that it is too hackneyed. Its particular "star" is the Giant Eland.

It is a good country, perhaps, in which to learn the ropes. Kenya, Rhodesia, and the White Nile are probably the best districts in Africa in which to make one's first big game shoot. They are all fairly easy, there is a large variety of game in each, and the bundobast is all more or less ready cut and dried for you in Khartoum, Nairobi, or Livingstone. As long as the young shikari makes a point of going for the particular "star" in each country, before and as well as the commoner game, it won't be time wasted in the far future.

But this point cannot be too strongly emphasized. You must go for the rarities and take the ordinary game as it comes. Nothing is sadder than

to be stationed at Khartoum and see barge loads of common and indifferent heads killed haphazard by the Cook's Casual Tour sportsman brought down the Nile. His blood lust satisfied, he hardly wants to see his trophies again. He has killed so many head of game. Honour is satisfied. He is a great hunter.

Results are judged not by quantity, but by quality. The best sportsman of all is the man who comes back empty-handed, because he has not seen what he went out to hunt.

The best and only time of year for all the Sudan shoots is from November to the end of April.

The best base for the White and Blue Nile shoots, and even the Addax shoot, is Khartoum.

All stores, camp kit, servants, etc., are obtainable at Khartoum, and from there all advice and assistance can be had from the game warden.

As to the expense involved. Leaving aside the price of a licence and the expense of reaching your base, much depends on yourself. The Addax shoot cannot be done under £60 a month per gun, and possibly the White Nile shoot will cost as much. Many of the economical conundrums have been dealt with in the chapter on "Camp Bundobast," but you must reach your shooting area.

Unless you are a millionaire, and hire your private steamer, the mail steamer will carry you to your advanced base, and porters, donkeys, or camels will do the rest.

Each shoot has been dealt with separately and will explain itself.

It has always been a conundrum to me why an African shoot should cost more than a shoot in India, but I suppose it will be admitted generally that it does so. The primary and unavoidable reason is the cost of the journey to and from the shooting base. The majority of those who shoot in India are drawn from those who are stationed there, when it is merely a question of a railway journey, capped perhaps by a short motor run. But the majority of those who shoot in Africa come from outside, and they are faced by the expense of a long voyage out and homewards, on top of the journey to the shooting ground.

Moreover, the cost of game licences in Africa is a severe item, with an average of £50, as against a nominal pound or two in India. This high licence fee is generally reduced to a fraction in the case of serving soldiers.

Beyond these two exorbitant items, the cost of a shoot in Africa should cost no more than in India, and the Sudan is no exception to this rule. Avoid hotels and all civilized transport as far as possible, and take to the bush as soon as you can. There at least you know where you are, and, as there are no shops, you can calculate your expenses by the numbers and wages of your servants and carriers or transport animals.

It is true that modern transport will carry you more quickly to your shooting base, and up to a point it is unavoidable, but it adds enormously to the expenses. Personally, if I were offered the choice of motor or local pack transport for any selected shoot, I should unhesitatingly choose the slow local transport every time. It would be far cheaper in proportion to the amount of time spent, and it would be an opportunity to learn the country, the language, and the people. But to reach the high-tide mark of civilization, I admit that, when your time is limited, modern transport must be employed.

SUDAN (Continued)

CHAPTER TWO

THE BLUE NILE & ITS TRIBUTARIES

By A. L. BUTLER
Sometime Game Warden of the Sudan

I N endeavouring to respond to a request to write this chapter, I would like, at the start, to explain that it is intended only for the beginner, the man who is on his first African shooting trip, and not for experienced hunters whose knowledge of big game shooting is far greater than my own.

The districts here noticed—the valley of the Setit and the Blue Nile, with its affluents the Rahad and Dinder—were once the happy hunting grounds of that grand old sportsman and explorer, Sir Samuel Baker, by whom they were first brought to notice in his delightful book, *The Nile Tributaries of Abyssinia*. It adds much to the interest of travelling and shooting over the same ground to take this book with one, and compare Baker's description of the country and the game as he found it in 1861, with one's own experiences.

Another book which should be taken is *Game Animals of the Sudan*, by Capt. H. C. Brocklehurst. It will be found full of practical information and advice.

The best time of year for a trip in these districts is from December to March. Personally I would choose February, March, and April, but by April the heat is becoming greater than a visitor unaccustomed to it might care for. By May heavy rains make tent life uncomfortable, and travelling on the cotton soil country more difficult. This is the Blue Nile springtime, when the parched-up land turns swiftly green again after the long months of drought. Everywhere the grass is springing up with amazing vigour; the bare trees break into leaf and flower, and very beautiful many of them are; bird and insect life is in profusion. Camp under one of the great "tebeldis" that was a naked giant a month ago, and out of a canopy of big five-fingered leaves it will drop great cream-coloured blossoms around you until the ground is carpeted with them. It is the most beautiful month of the year, but for travelling it cannot be recommended. Water being plentiful again, the game is scattered over the country, and no longer concentrated in the vicinity of the rivers.

A pamphlet giving information about shooting trips in the Sudan, and a copy of the game laws in force, can be obtained on application from the Sudan Government Office in London. If, after a study of these, a trip to the eastern districts is decided on, it is advisable to inform the game warden, Khartoum, of your intentions as soon as possible, the number of

rifles allowed on the Setit and Dinder being limited, and applications being dealt with in order of priority.

The subject of rifles has been discussed elsewhere, and you will have made your selection. Both good sportsmanship and common humanity demand a proper restraint in the use of them. In steady hands, and within easy ranges, a rifle can be almost a humane killer; used wildly, and at distances beyond the capacity of the shooter, it may, only too easily, become an instrument inflicting protracted suffering. Every game warden knows that there are some men who are not fit to be let loose in Africa with a rifle at all.

Good woodcraft and careful stalking, together with perseverance and control of excitement, will do more in the long run to ensure success than skill in shooting at long ranges. Spare no trouble in trying to get within the range at which you feel pretty confident of placing your bullet more or less where you mean to.

Game shooting is not quite the same thing as shooting on the range. The lying down position, the steadiest and easiest, is often impossible, owing to intervening grass and bushes, and a crawl on all-fours, or *ventre à terre* in the heat, is apt to make one a bit unsteady when the moment for shooting comes. Take advantage of a rest when possible; carry a stick or short spear as a support for your left hand if it helps you; if you can shoot better with a telescope sight than without one, use it by all means.

I have heard it said that the use of a telescope sight is unsporting, and "gives the animal no chance." This is sheer rubbish. If you refrain from firing until you have got within easy range the animal has plenty of chance of detecting you and making off before you shoot. The shot itself should be as nearly a certainty as you can make it. A shot which gives the game a "chance" of being missed altogether also gives it the "chance" of getting away with a shattered leg, or a ghastly stomach wound.

It is the abuse of the telescope sight, and not the proper use of it, which is unfair. Trying shots beyond ordinary fair ranges because the telescope enables you to see the animal distinctly is cruel, unsportsmanlike, and altogether reprehensible.

If you should happen to wound a Lion or a Leopard while using the telescope, take it off before further proceedings. It does not improve the handiness of the rifle when it may have to be used as quickly as a shotgun, and in the event of a charge you are safer without it.

It is best to make a practice of carrying your rifle yourself, or one of them, if you have two out; the more you carry it, handle it, and aim at various objects with it, the handier it becomes, and the better shooting you will make with it. Besides this, if you allow a gun-bearer to carry it until it is required for a shot, an unexpected chance may be lost before it can be handed to you.

It is unlikely that the first animals of their kind which you meet with will be the best that you will see, and it is as well to leave them in peace. Later on you will see more of them, and almost certainly be able to choose better heads.

Make it a point of honour, as it is, to observe the Game Laws loyally, not looking on them as vexatious restrictions, but remembering that in easily accessible districts nowadays the possibility of obtaining sport is entirely due to them. Men who grumble at being allowed only one or two

of a particular species on a licence are apt to forget that their opportunity of meeting with the animal at all is owing to these same limits having been imposed on others for years past.

In recent years many men have found the photographing of game animals in their haunts a more fascinating sport than killing them, and wonderful pictures have been obtained by enthusiasts. It is far harder to secure such photographs than to shoot the animals, and some of them, taken at the closest quarters, are evidence of the coolest nerve and finest woodcraft.

Photographs of dead animals, though not in the same class, if showing form and markings distinctly, are sometimes of considerable interest to the zoologist as well as to the shooter. Photographs of *wounded* ones are simply an abomination. I have some of a crippled Roan Antelope, and of a dying Giraffe swaying its long neck about in its death struggles, which are a disgrace to the man who walked round the wretched animals, photographing them from different points, before putting them out of their misery. And these were actually sent to me in the hope that I should be pleased with them!

Modern means of transport have made the shooting grounds of the Eastern Sudan very easy of access nowadays, and the long, wearisome camel journeys from Khartoum over gameless and uninteresting country, once the only way of reaching them, are a thing of the past. As a game officer, I used to dread the advent of the railway and the motor car, anticipating that increased facilities for reaching these districts would result in a rapid diminution of the game. In this I am glad to say that I was wrong, as the rapidity with which a patrol can now be despatched to check the operations of native poachers, always far more destructive than the shooting by sportsmen, has proved of more than compensating advantage to the game, which does not appear to be decreasing.

The Setit is now reached by rail from Port Sudan to Gedaref, and thence by car to Sofi, on the Athara, a run of some 40 miles. Here your camels should be ready waiting for you, as beyond this point cars are not allowed to proceed. To Wad Helewa, on the Setit, is a short march of 8 miles or so. This is the village of the Hamran Arabs, but the famous sword-hunters of Baker's day have long passed away, and this method of hunting has not been practised for many years. During the period of general misery and depopulation of the country which occurred under the rule of the Mahdi and the Khalifa, the Hamrans fell on evil days. There are now not more than a couple of hundred of them, all told, a decadent remnant of a once virile and prosperous tribe. When I first made their acquaintance, in 1903, some of the oldest men remembered Baker's visit, but I doubt if any of them are living now. They told me at the time that, in one of the last Elephant hunts in which the sword was used, the hunter was caught and killed.

The resident population on the Setit is very small, there being only one other permanent village on the river, but in the winter months large numbers of nomad Arabs of the Beni Amer tribe bring their camels south into this district for the grazing. They do not, however, molest the game, which takes little notice of them or their camels, and their presence does not seriously interfere with sport.

Raids by poachers from the territory over the Abyssinian border have

always been a trouble on this river. These men are usually in parties, well armed with rifles, and quite ready to use them when taken by surprise, but improved transport facilities make it more easy to deal with them than formerly, once their presence on the river has been reported.

The wild and broken country through which the Setit flows is so cut up by khors and ravines in the immediate vicinity of the river, and so thickly overgrown with bush, that it is impossible, in travelling, to follow the banks closely for any distance. The track keeps mainly to the higher and more level ground on the side of the valley, cutting off curves, or running more or less parallel with the river bed, into which it is only possible to descend by the game paths which lead to regular drinking places, or *meshras*.

In places the river, dwindled in the winter months to a clear, shallow stream 20 or 30 yards wide, flows between wide beaches of smooth, rounded stones; in others its bed is strewn with boulders of rock, or hollowed into deep pools; here and there the banks rise into high cliffs, as at Gira (where the rock is white or pinkish limestone), or at Umbrega, where the channel is walled in by cliffs of white sandstone.

Here the Khor Royan enters the Setit from the south, pouring into a great circular basin in the rocks worn by the whirlpool formed by the junction of the two torrents in flood time. At this spot the boundaries of the Sudan, Abyssinia, and Eritrea meet. South of the Setit, and beyond the Royan, is Abyssinian territory; north of it, above the junction, is Italian. The picture of the place in Baker's book gives a rather exaggerated impression of the size of the whirlpool.

From the sportsman's point of view this is a most attractive river. It is frequented by a great variety of game, from Elephant, Buffalo, and Giraffe down to the tiny Dik Dik. It is excellent Kudu country, and Tora Hartebeest and Heuglin's Gazelle, neither of which are met with on the White Nile, are both fairly plentiful. In the deep pools magnificent fishing is obtainable, while Guinea-fowl, Francolin, and Sand Grouse, afford sport for the shotgun and variety for the pot.

The upper Atbara country is very similar, but north of the Setit junction game is comparatively scarce. The neighbourhood of Mugatta is, however, well worth visiting for Lion and Leopard.

The Dinder is reached by rail from Khartoum to Makwar, and by car to Abu Hashim, where the baggage camels should be ready to start up the river. Or, if you prefer to meet them at Makwar, and load up there, to Abu Hashim is only one march.

Unlike the Setit, which is at all times a running stream, the Dinder dries up in winter into a series of pools, separated by stretches of sandy river bed, in places with considerable intervals between them. The flat country through which it runs is mostly open thorn forest or grassy plains. At this season the game, dependent on these pools for water, congregates along the river in great abundance.

Open marshy patches, or *mayas*, where the grass remains green longest, are favourite grazing places, and the quantity of animals which gather at them must be seen to be believed. At such spots, Buffalo, Giraffe, Roan, Waterbuck, Tora Hartebeest, Tiang, Wart-hog, Reedbuck, Oribi, and Ariel may all be in sight at the same time.

The first march from Abu Hashim takes one to Beda, the last village on

the river, and after another day's travelling game begins to become plentiful, and continues so all up the river to the frontier. Ras el Fil, a point where the river bends in a loop, Semsir, an island called Um el Rug, a lagoon known as Ras Amir, and the Khor Galegu, which extends from it towards the Rahad, are all good spots, but camping places can be chosen wherever game seems most abundant. The best plan is not to halt too long at any one place on your way up the river, but to make yourself acquainted with the whole of it first, and then to work back again, making standing camps at the points you have selected.

The Rahad can be reached by car from Makwar to Mufaza, which can be made the starting point, or by marching across to it from the Dinder. A convenient route is from Ras Amir, following the Khor Galegu for part of the way. This is only one march.

This river, like the Dinder, flows through flat cotton soil country covered with thorn bush or high grass, and is reduced in the dry season to a series of pools at varying intervals. It has a narrower and more winding channel, and steeper banks, which in places are perpendicular cliffs of soil 30 or 40 feet high. In old days a chain of villages extended along it, with a considerable population, but the upper part of the river is now uninhabited, and there are no villages above Shammam. There is less game, especially of the larger kinds, than on the Dinder, but Ariel abound, while Gazelle, Reedbuck, Bushbuck, Wart-hog, and Oribi are fairly numerous. Lion and Leopard are very plentiful, preying, near the villages, on the cattle and goats of the natives, and on the upper part of the river principally on the herds of Ariel. Indeed, if Lions are a special object, the neighbourhood of the Rahad is as good a locality as any in the Sudan.

As alternatives to returning over the ground already traversed one can cross to the Dinder (one march), or strike across to Gallabat, try the broken country along the Atbara near it for Kudu, and return by Gedaref. The crossing to Gallabat took my *hamla* twenty-one hours' marching.

On the Blue Nile itself most of the kinds of game found on the Dinder are obtainable, with the exception of Tora Hartbeest, but game is scarcer and more scattered. From Bados to Jebel Maba, about 20 miles above Roseires, is the best game country, and affords a chance of Kudu, which are seldom met with on the Dinder. Jebel Maba, a rocky hill a little distance from the river on the east bank, is regularly frequented by them.

Travelling is easy, and the scenery along the river very attractive, its long gleaming curves of blue water, margined with yellow sand, lying between forested banks edged with scattered "tebel-di" trees. Above Roseires it becomes much broken by rocks and rapids; near the frontier, between Famaka and Fazogli, it passes through a deep gorge, in which it lies below one like a milky blue tarn.

As far as baggage is concerned, camels are the only transport animals used in these districts. For your personal use you can choose between a camel, which you can hire, or a pony, mule, or donkey, which it is better to buy. A pony, though the pleasantest mount, requires most attention, and entails taking a *sais* to look after it; also, if it happens to go lame, or crock up, you may have to take over a servant's camel, with *maklufa* (saddle) which will probably not be comfortable.

A good riding donkey is a game little beast, of much greater capability than anyone unused to them might imagine, and at its own little tripping

pace will patter along under you for 20 miles a day. Its disadvantages are that you cannot carry much on one; that when it stumbles it generally, under a man's weight, comes down; and if you sight game, and get off to have a shot, it will almost certainly choose the critical moment for one of its most appalling vocal efforts.

My own experience is that a camel is the most useful animal for a journey. Should you decide on riding one a little attention to the saddle and its equipment before starting will add much to your comfort on the march. See that the *maklufa* provided for you is roomy, fairly deeply hollowed in the seat, and has a good thick cushion. Buy a good *farwa* in Omdurman or Port Sudan. This is a tanned sheep-skin with a thick, silky, white fleece, which, laid over the cushion of the saddle, completes the comfort of the seat. It is also most useful to lie on during a halt, and as a mat by your camp bed. The *farwa* provided by the camel contractor is likely to be a worn and dirty old thing, originally dyed blue, neither soft to sit on nor pleasing to the eye. A good one gives your camel a well-turned-out appearance, while a bad one has the opposite effect.

Purchase also a pair of the big leather saddle-bags known as *hoorgs*. These will hold almost anything you are likely to want with you on a march. Field-glasses, camera, ammunition, diary, a book or two, an electric torch, a clean shirt, a towel, a tin of biscuits, and more, can be stowed in their capacious depths, and will make you independent of your *hamla*, should you ride on ahead and have a long wait for it, or should you miss connecting with it at an arranged meeting place.

A *zanzimeer* (square canvas water-bottle) should be hung on the crutch behind you, and there will still be plenty of room to sling a gun or rifle, in a leather cover, on the saddle. No beast, except an Elephant, approaches a camel for carrying capacity, and on top of all this you can find somewhere to tie on a brace of Guinea-fowl, a Bustard, or a Gazelle, if occasion requires.

The only other thing you need is a *koorbash* (hippo-hide whip). The moral effect of this swinging about, and an occasional flick, will keep the camel up to the mark. If you are without one he will discover the fact very quickly, and become exceedingly leisurely in his movements.

When the moment of starting on your first march arrives, and your unfamiliar and uncouth-looking steed is lying saddled and ready, you may, perhaps, if you have had no previous experience with camels, approach it with rather dubious feelings. Your mount will probably regard you with equal misgiving, turning its head towards you with open mouth, and uttering blood-curdling gurgles and roars.

Make one of your men put his foot on the animal's knee, to keep it down while you mount, and then get into the saddle quickly, and throw your right leg round the crutch. The creature will then rise to his feet, a process which involves for you one backward jerk as he straightens his forelegs from knee to shoulder, a pitch forward as his hind-quarters come up, and another, backward again, as he picks up his forefeet. Be ready to counteract this upheaval by three swaying motions of your own, forwards, backwards, and forwards, again. If you synchronize these movements nicely with those of your steed you will go 8 feet up into the air quite smoothly. If you do not, you will go up, but there will be no smoothness about it.

It is best to mount quickly, and not too deliberately, or the camel may, especially when you are strange to it, scramble up before you are home in the saddle, leaving you "as you were." Once up he will walk off solemnly and slowly, with no further show of resentment, and you will find it easy to guide him by the one rein of soft rope, and by taps of your foot on the sides of his neck.

The next thing is to get him into a trot, and this, in a really good riding camel, is smooth and springy, a most comfortable pace.

The best, however, are not easily obtainable, but you should be supplied with a fairly easy mount. You will find it less fatiguing to sit loosely, with your muscles relaxed, allowing yourself to joggle with the motion of the animal, than to sit stiffly erect.

To get your camel down again, without assistance, when you want to dismount, tap him on the top of the neck with your heel, and say, "*Ich! Ich! Ich!*" (best German pronunciation!) His fore-quarters will then, after trembling in the balance, drop away precipitously in front of you as he comes to his knees; then his hind-quarters, throwing you back; then his fore-quarters again, as he settles to the ground. This time you sway backwards, forwards, and backwards, to correspond. You can dismount at your leisure; being down he will stay down.

You will soon feel at home on him, and will find him a placid and amenable creature, sure-footed, and giving a satisfying feeling of great strength under you.

It should be remembered that splendid fishing is obtainable on the Blue Nile, Atbara, and Setit, whose deep pools contain fish of immense size and fighting power. One of them, the great Nile Perch, or *Aigle*, frequently exceeds 100 lbs. in weight, and must, I believe, occasionally reach a weight of nearly 400 lbs. Though such a fish has never been weighed, I do not think this estimate is exaggerated. I have assisted in the capture of one (not on rod and line) which weighed 243 lbs. I took the measurements of this fish, and kept some of the largest scales. But, at an abandoned native fishing camp on the Bahr el Ghazal, I once found the heads and scales of two *Aigle* which made those of the 243-pounder look small in comparison.

The Tiger Fish, or *Kass*, with terrific teeth protruding beyond its mouth, though generally under 20 lbs. in weight, is a dashing and savage fighter, and there are other species which, though not such sporting fish as either of these, run to a great size.

The fishing, in fact, is quite as good as the shooting, and it is well worth while to take out suitable tackle, and devote a part of your time to it. Excellent practical advice as to what is required is given in the *Notes on Big Game Shooting* obtainable at the Sudan Government Office. Do not fail to notice the writer's remarks on the necessity of taking a casting net for catching live bait, and, unless you know how to use one yourself, be sure that you have a man with you who can throw it, even if you have to engage one for the purpose. This is essential to success.

In any case it is worth taking an old salmon or pike rod with you, and all the old spoon-baits, wagtails, or Devons you can hunt up. You will have plenty of fun while your tackle lasts, and will get some fair-sized fish before the bigger ones have broken it all. Use steel wire traces; gimp or gut are useless.

There are Crocodiles in all these rivers, and it is dangerous to wade, especially when your attention is occupied in fishing. Should you notice just the eyes of a big one show above the surface some distance away, and then disappear, it is as well to stand back a little from the edge of the pool. Having marked the exact position on the bank of a man or animal which it intends to attack, a Crocodile will approach quietly under water, and then make a sudden rush. This caution may sound a little superfluous, but in Selangor, on the Sungei Buloh River, one of my Malay boatmen was taken in this way by a big Crocodile within a few yards of me.

SUDAN (Continued)

CHAPTER THREE

THE GAME ANIMALS OF THE BLUE NILE

By A. L. BUTLER

LION (*Felis leo*), Local Names "ASAD," "DÛD."—Lions may be met with anywhere in the country here dealt with. They are particularly plentiful along the Rahad, and the Atbara in the neighbourhood of Mogatta, and these localities should be visited if Lions are a special object.

They are much more gregarious by nature than other large felines; a considerable number will sometimes unite in a troop, as, nowadays, every visitor to "the pictures" knows. In the Sudan, however, it is rare to meet with more than five or six together. Sometimes these may all be adult males.

I have an idea that there is a good deal of mortality among young cubs; on many occasions I have seen a Lioness with only one following her, though three or four are produced at a birth.

Lions are often on the move, and will frequently kill, during the daytime. They are quick to notice the Vultures descending on a freshly shot animal, and will sometimes emerge from covert and arrive at the feast very soon after the birds.

A pool which their tracks show to be a favourite drinking place is well worth watching in the late afternoon; there is a fair chance of a Lion, or two or three, coming to it a little before sunset.

There is always a chance of getting a shot by watching a fresh kill, or a bait, during the day, but a night watch is, of course, much more likely to be successful. Owing to the generally thorny nature and small size of the trees, a shallow pit dug in the ground and roofed over with thorns is more often used in the Sudan than a raised *machan*. This should be close to the bait or water hole; 10 or 12 feet is not too near. A Lion will come within this distance if one is well concealed, and keeps still, and at night it is difficult to make certain of anything but the closest of shots. A pellet of cotton wool the size of a pea, tied on the barrel with thread, and adjusted on the foresight, seems to show up better at night than white paper or paint. Artificial light I have never tried.

Waiting for Lions by night may not be the most sporting way of killing them, but a nocturnal vigil in the African bush is not without a certain eeriness, and events may provide some unanticipated thrills before dawn, when the roof of bare thorns, which looked so satisfactory by daylight, seems very thin against the starlit sky, and your pit begins to strike you as a very shallow shelter.

Often, too, especially if one is watching a water hole, there is the interest of seeing creatures seldom met with by day. Perhaps a Porcupine will come close to your ambush, stamping its feet and rattling its quills if it becomes suspicious; once a party of five animals, which I at first took for striped Hyenas, proved to be the quaint little Aard Wolf (*Proteles*); another time a little Genet Cat entered my hiding place, climbed on to my shoulder, and touched my ear with its little cold nose before making a hasty exit.

LEOPARD (*Felis pardus*), Local Name "NIMR."—Throughout the game districts of the Eastern Sudan, Leopards are common, but no animal is stealthier or more secretive in its ways than this beautiful great cat. Rocky hills and thickets of "kitr" thorn near the rivers are favourite strongholds, but wherever game is to be found, or wherever goats and sheep are to be picked up, Leopards will be near at hand. So wary are they, however, that unless one waits for them by a kill or a tethered goat, one may spend months in country where they abound without ever seeing one. I have had the luck to come across four on four consecutive mornings, all of which I killed, and then not had a shot at another for three years. Whether you see any Leopards on a trip or not, you may be certain that many have seen you, and slipped back silently as a shadow into cover while you were still at a distance. They are far from being exclusively nocturnal in their habits, though their peculiar grunting, sawing roar is seldom heard before dusk, and will return to a kill, or creep up to a bleating goat, in full daylight, morning or afternoon..

Their sight and hearing are very keen, but I think their sense of smell is comparatively dull. I have seen them follow a kill which had been dragged out of a thicket on to more open ground, snuffing slowly along the trail with nose to the ground, but I have had them extraordinarily close to me when I was concealed without their detecting me by scent. On one occasion I made a screen of grass tied against sticks, with a loop-hole in it, facing a goat which had been killed, and lay waiting in this during the afternoon. Suddenly a Leopard came right across the opening, and halted there. I could see every hair on his side, and could have stroked him with my hand, but I could not put the Mauser to my shoulder, as he was *within the length of the barrel*. Very slowly I pushed the stock of the rifle behind me, and was trying to align the muzzle for his heart, when he detected the movement, and sprang out of sight with a growl. He never reappeared.

There is a great fascination in watching a Leopard stalk a bait, or return to a kill. Though you may not have taken your eyes off the ground across which the approach must be made, it frequently happens that the animal will be close to you, before your eye picks up the lithe spotted form gliding slowly forward. Always, when you are waiting for a Leopard, and especially when you are on the ground on a level with it, avoid making even the slightest *sudden* movement. This will almost certainly be detected. If there is a rustle or the snap of a twig behind you, either remain perfectly motionless with your eyes on the bait, or, if you turn your head, let the motion be almost as slow as the hands of a clock. And, when the time comes, the rifle should creep to the shoulder as slowly and gradually as you can raise it.

Through keeping still enough, I have, two or three times in daylight, killed Leopards only 10 or 15 feet from me, though I was not over well

concealed. The "close up" view of them at these distances, before one ends it with a brain shot, is ample reward for a patient and motionless wait.

CHEETAH (*Acinonyx jubatus*), Local Name "FAHD."—Everywhere a much scarcer beast than the Leopard, and rarer in the Eastern Sudan than it is in Kordofan. Indeed, on this side of the country I only met with it twice, both times on the Setit. On the first occasion the late Colonel Collinson, then Governor of the Kassala Province, shot one when we were travelling together; the second I turned out of a thorn bush, over which a climbing vine with a fleshy, hexagonal, jointed stem had formed a dense canopy. Thinking it looked a likely place for a bird's nest, I gave it a kick as I passed, and a Cheetah bolted out of it. He went across the open at a great pace, his long tail waving in the air, and I missed him twice.

ELEPHANT (*Elephas africanus*), Local Name "FL."—Elephants are still tolerably plentiful on the Blue Nile and its tributaries, while on the Setit there is generally a big herd in the country near the Atbara junction. Their ivory, however, never approaches the weight of big tusks from the Southern Sudan, though the animals themselves are as large as any in Africa.

Requiring, as it does, cool and correct calculation of the position of the vital organs in the animal's huge bulk, as well as steady shooting, often at the closest quarters, and with the giant beasts all about one, some visible and some concealed, Elephant hunting is an exacting test of nerve and presence of mind. Even an old hand feels, as one of the most experienced Elephant hunters of the present day has put it, a thrill "not unmixed with relief when that awesome brooding mass kneels suddenly to the shot."

The most vital shots, and the respective advantages of large and small bore rifles, are dealt with elsewhere.

BLACK RHINOCEROS (*Rhinoceros bicornis*), Local Name "KHERTFT."—The Rhinoceros is now, I am afraid, practically extinct in this part of the Sudan. It is, fortunately, the only animal which has gone off the local list in recent years. The very few which remained at the time of the reconquest of the country were a remnant too small and scattered to save.

BUFFALO (*Syncerus caffer aequinoctialis*), Local Name "GAMŪS."—The forms of Buffalo found in different parts of Africa show an extraordinary amount of variation in size, colour, and shape of horns. The great black Buffalo of the Limpopo region, with the bases of the horns forming massive rounded bosses on the forehead, is obviously not identical with the Buffalo of the Dinder, while neither could possibly be confused with the little red Buffalo of the Congo. If all African Buffaloes were as easily distinguishable their division into different races, or "sub-species," would be a simple matter. The trouble is that between, and connecting, such distinct types as these, there are many others, differing from them and from each other much less markedly, and often tending to intergrade. So far the attempts of zoologists to define the differences between these local races can only be regarded as confused and unsatisfactory. More than twenty "sub-species" have been described and named, for no fewer than fifteen of which two naturalists, Matschie (with ten) and Lydekker (with five) are responsible. In separating these far too much importance has been attached to the exact shape of the horns, and the direction of their tips, in the comparatively few specimens examined. Matschie, for instance, gave the

name of *azrakensis* to a Buffalo from near Roseires, on the Blue Nile, principally on account of its horns turning downwards at the tips. There is no race of Buffalo on the Blue Nile in which the tips of the horns normally turn downward, and the example he describes is not typical of the local form.

The utility of giving names to so many forms, based on the scantiest data, and between which dividing lines cannot be drawn distinctly, is very doubtful. The late Mr. Roosevelt always declared that three Buffalo which he killed *out of the same herd* represented two, if not three, of Matschie's "sub-species."

In the fifteen years during which I was game warden in the Sudan I had the opportunity, while inspecting trophies, of seeing not one or two, nor a dozen, but hundreds of heads of Buffalo from the White Nile and Blue Nile districts. Speaking generally, it is safe to say that the Blue Nile Buffalo is a rather smaller animal, with horns usually forming a stumpier, broader crescent when viewed from directly in front, and never attaining the width of spread of good White Nile heads.

It is usual to refer all Sudan Buffaloes to *æquinoctialis*, and for the White Nile animal this is certainly correct, as the "type" came from that locality, but, when comparison of trophies is concerned, the Buffalo of the Blue Nile, Dinder, and Setit, should be considered as a different race, and Matschie's name *azrakensis* might be used for them.

I once had a very uncomfortable experience with Buffalo on the Dinder. I had shot a Roan Antelope and, leaving the Arab who was with me to bring in its head and my Mauser rifle, took the .450 Cordite, and started back to camp through the open thorn bush. At one point the ground rose slightly, forming a ridge about 60 yards ahead. On the other side of this there arose a rumbling sound, which came nearer and nearer, gathering volume as it came, and suddenly over the crest of the rise, in a haze of dust that rose high above them, came a herd of seventy or eighty Buffaloes, bearing down on me at a gallop. They came on a wide front, which there was no possibility of avoiding and, expecting to be under their hoofs in another moment, I fired at a bull straight in front of me. He had his head up, with his throat exposed, and the bullet caught him in the centre of it, breaking his neck and killing him instantly. The shot seemed to split the herd in two at the last moment; the animals on each side of the one which fell swerved outwards, and next second there was a jostling mass of Buffaloes thundering past on each side of me, their great black bodies boring into each other in their effort to avoid me! They made the cracked cotton soil under my feet vibrate as they passed, but those nearest to me rode the others off most effectively, and left me in a cloud of black dust, with the dead bull lying just in front of me.

This was in no sense a charge—I do not think the rush of a whole herd ever is, though it may sometimes appear like one. The animals were just in a headlong stampede, though the cause of their alarm was not apparent. Captain Brocklehurst records a very similar experience, when a whole herd stampeded straight at him, after the firing of a shot: "I ran to meet them, waving my hat, and the herd divided and passed on each side." Probably if I had had the nerve to do the same thing, the result would have been the same, but at the time my one idea was to shoot, and to shoot straight.

In shooting Buffalo never be tempted into firing long or wild shots.

Track up a single bull, in preference to a herd, for your initial encounter. You are less likely to be detected, have only one animal to attend to, and you avoid the risk of killing a cow in mistake for a bull. The closer you get to your quarry after sighting it the grimmer it looks, but every yard nearer increases your chance of being able to settle the business with the first shot, and the safer you really are. A badly placed shot, which results only in the animal rushing off and getting out of sight, necessitates tracking it up again, and this time, wounded and savage, but not disabled, it is likely to be very much more dangerous.

Unless you can approach within easy range, hold your hand and wait for a better opportunity.

TORA HARTEBEEST (*Bubalis tora tora*), Local Name "TÉTEL."—This form of Hartebeest is tolerably plentiful on the Setit, the Atbara above it, and the upper part of the Dinder, and is only obtainable in these districts or in Abyssinian territory.

I have never seen it in large herds; usually it will be met with in small parties making their way to the water, or loitering near it, when they are much more easily approached than on an open plain.

Looked at from in front the horns are shaped like an inverted bracket. The tips may be directed straight backwards or slightly inwards, in heads from the same locality. Good average horns measure about 20 inches; the record is $2\frac{1}{2}$ inches longer. Height about 50 inches. W. B. Cotton records the weights of four as 325, 313, 323, and 397 lbs.

TIANG (*Damaliscus korrigum tiang*).¹—Tiang are abundant on the upper Dinder and Khor Galegu, associating in large herds, though the immense numbers which may sometimes be seen on the plains near the Bahr el Jebel and Bahr el Ghazal are never met with.

Their skins, dark chestnut with black face and limb markings, are overlaid with a plum-coloured gloss like the markings on "watered silk."

Their horns, in the Blue Nile districts, seldom exceed 23 inches in length, the larger heads recorded from Kordofan belonging to another race.

Weight of two adult males, 311 and 320 lbs.; of a female, 261 lbs. (W. B. COTTON).

ABYSSINIAN DUIKER (*Cephalophus grimmi abyssinicus*), Local Name "UM DIG-DIG."—This Duiker is found round Gallabat, on the Dinder, and on the upper Blue Nile. They generally keep to thick covert, under which they travel with their heads carried low and stretched forward, and their hind-quarters hunched up. Their colour is yellowish brown, with a blackish line down the face. Horns are very small, averaging about 3 inches, but sometimes reaching 4, straight and sharp. A long, pointed tuft of hair rises between them, and sometimes looks almost like a third. In front of each eye is a long, slit-like gland. Weight about 25 lbs.

SALT'S DIK DIK (*Madoqua saltiana*), Local Name "UM DIG-DIG."—These miniature Antelopes are common on the Setit and northwards, but do not extend to the Rahad or Dinder. During the day they hide in thorn scrub, or among rocks, but at dusk one often sees their little shadowy shapes moving over some stony slope.

Their colour is a mixture of grizzled rufous and grey, and a fan-shaped brush of hair, rising from the forehead, almost conceals the little, needle-sharp horns. A very close view is required before the sexes can be

¹ Also called "TÉTEL," or "TÉTEL AHAU."

distinguished. The nose of a Dik Dik is swollen and rather elongated, and covered with hair to the edge of the nostrils.

The limbs are very slender, and the tiny hoofs leave the daintiest little slot imaginable.

I once saw a Dik Dik, during the heat of the day, lying down comfortably in the solid shade under the body of a Gazelle, which, in its turn, was standing under the scanty shade of a leafless thorn. I took them for mother and child until they went off in different directions, when the identity of the Dik Dik was unmistakable.

ORIBI (*Ourebia montana montana*), Local Name "MOHR."—Oribi occur throughout the Blue Nile districts wherever there is grass and water. They are often found quite close to villages, and are likely to be the first game animals met with on a Dinder trip, possibly even before Abu Hashim is reached. They are generally in twos or threes, and when a small supply of fresh meat is required are about the best animal to select for the pot. Like Reedbuck they utter a shrill whistle when alarmed.

Their height is about 21 to 22 inches, and average horns measure about 4. Five inches is rarely exceeded. Weight about 30 lbs.

The Arabic name is "*mohr*," though natives often apply the name "*Um dig-dig*" to them as well as to Duiker and Dik Dik.

All three of these little Antelopes require accurate shooting to kill them cleanly, and will go struggling on when terribly wounded by a badly placed bullet.

I once witnessed a very curious incident. Two Oribi, a buck and a doe, were playing together, and chasing each other about much as one may see two rabbits doing in an English park. Presently they pulled up, and stood together under the shade of a tree. A minute later a dove fluttered down close by, and began feeding towards them. When it was within a few feet the buck made a sudden spring at it, and struck it down with his fore feet, just as it spread its wings to rise. I could see the puff of feathers ripped off from 80 yards away. At this point I was surprised into making a movement forward, and the Oribi bolted. I picked up the Dove, dying, with its back broken.

I never saw a wild Antelope take any notice of a bird before or since, but a pet Duiker buck, which I kept loose in my garden on one occasion attacked and killed a tame Bustard, and I remember an old Maral hind, in the Giza Zoological Gardens, which several times struck down Sparrows with a forefoot, and once killed a loose Purple Heron which alighted in its paddock.

WATER BUCK (*Cobus defassa defassa*), Local Name "KATAMBÛRU."—Water Buck are common on the Setit, in the broken country southwards along the Atbara to Gallabat, on the Dinder, and the upper reaches of the Blue Nile.

They are usually in small parties, or herds of up to thirty or more, often with several males in a herd, when judgment is necessary in picking out the head that may be an inch or two longer than the others.

They are naturally unsuspicious and easy to approach, but become shy and nervous where they have been much harried.

Height about 48 to 50 inches; weight round about 500 lbs.

An average good Blue Nile head measures 29 or 30 inches. Horns considerably exceeding this are obtained in the Southern Sudan, the record



SUDAN GAME

Plates 26—27

Top. A YOUNG DEFASSA WATERBUCK.

Bottom. ELAND (TYPICAL RACE) MUCH COMMONER AND LESS LOCAL
THAN THE GIANT ELAND.

being as much as $38\frac{1}{2}$ inches, but the animals are, perhaps, not quite racially identical.

Many years ago—in 1903—I saw a remarkable head on the Setit; the horns, through malformation or some accident in youth, spreading straight, outwards on each side of the head, and practically lying in one straight line. As far as I could judge the expanse would have been quite 4 feet. I tried hard to shoot the animal, but it was in a rather large herd, which had been alarmed by my *hamla*, and would not let me get up to them.

A still more remarkable freak head is recorded by Captain Brocklehurst, "The horns turned down in front of the ears and crossed symmetrically underneath its chin."

REEDBUCK (*Redunca redunca cottoni*?), Local Name "BASHMÂT."—Reedbuck are abundant on the upper parts of the Rahad, and on the Dinder in the vicinity of the Khor Galegu. They are met with singly, in pairs, or in small parties, on grassy plains or *mayas* near water, and often descend into the river beds, where they are easily stalked along the bank. When startled they utter a shrill whistle—a sound that is by no means welcome when one is creeping cautiously towards more important game.

I have put a query after *cottoni*, as I am uncertain whether this is the correct name to apply to these Reedbuck of the Rahad and Dinder. Zoologists, more to their own satisfaction than that of the sportsman, and often unavoidably working with an insufficient number of specimens to judge by, have divided Reedbuck and other Antelopes into numerous or sub-species, on the strength of differences which by no means always hold good when a large series is examined. Stress is often laid on the curve and amount of divergence of the horns, in the Reedbucks a most variable character, before the amount of variation which may occur in these in animals from the same locality is sufficiently known. The specimen selected for description remains for ever the "type of the sub-species," though it may prove later that heads of quite a different style are equally common in the same district. If one happens to be shooting in the locality from which the "type" came, one is, of course, safe in using the name given to it for all specimens of the species from that locality. The trouble begins when one is in a district equi-distant from the "type localities" of two different sub-species, and wants to know the correct name for animals which do not agree consistently with either description. When I first went to the Sudan we were content to call our Reedbuck *bohor*, the name given to the race inhabiting Central Abyssinia. But in 1902 the name *cottoni* was given to Reedbuck obtained by that fine sportsman and traveller, Major P. H. G. Powell-Cotton, between the Bahr el Jebel and the Bahr el Zeraf, and these were separated as a distinct race.

They were described as resembling *bohor*, but having horns longer, thinner, and more divergent, with more or less marked incurving at tips, and the skull slighter and shallower vertically, though of the same length. In the British Museum *Catalogue of Ungulate Mammals*, and in Rowland Ward's *Records of Big Game*, all Sudan Reedbuck are ascribed to this race, and both works illustrate heads with a widely diverging type of horns. Captain Brocklehurst, however, calls the Reedbuck of the Blue Nile and its tributaries *bohor* ("horns short and massive and hooked forward, the record length being $12\frac{1}{2}$ inches"), and those of the Bahr el Ghazal, Mongalla, and Upper Nile Provinces *cottoni* ("horns longer, thinner, and

more divergent; record length $16\frac{3}{4}$ inches; tips very far apart, sometimes 20 inches or more.")

But good horns from the Rahad and Dinder run to considerably more than $12\frac{1}{2}$ inches; 14 and over is not exceptional, 15 being the record, and horns with a very wide spread or a very narrow one may be seen in the same party of animals. One Blue Nile head of 14 inches has a spread of 18; another of 13 inches has the tips only $4\frac{1}{2}$ inches apart, while any intermediate measurement occurs. It seems difficult to attach much importance to the amount of divergence in horns as a distinguishing character.

"About 80 lbs.," the weight given by Captain Brocklehurst for a full-grown male Reedbuck, is considerably exceeded by the Blue Nile race. Five males weighed by Mr. W. B. Cotton scaled 97, 118, 107, 103, and 99 lbs., an average of almost 105.

The horns of Reedbuck are nearly always soft and rubber-like round the base, and shrinkage will slightly reduce measurements taken when the horns are fresh.

ARIEL (*Gazella sammerringi sammerringi*).—Ariel (the name is the Arabic one, and has nothing to do with the fairy who was Caliban's unfortunate slave) are by far the most abundant species of Antelope in the Eastern Sudan, and inhabit all the country between the Atbara and Setit and the Blue Nile.

In the winter months, the dry season, they concentrate along the Rahad and Dinder, and one is seldom out of sight of them, often in very large herds, which troop down to the water at any hour of the day. They are much preyed on by Lions, which are sure to be numerous where Ariel abound, as on the upper reaches of the Rahad.

The horns are shorter and more abruptly hooked inwards at the tips than those of the Somaliland race. A good head measures 14 to 15 inches. The record for the Sudan is 17, but heads above 16 are uncommon. Weight about 100 lbs., and sometimes up to 125 lbs.

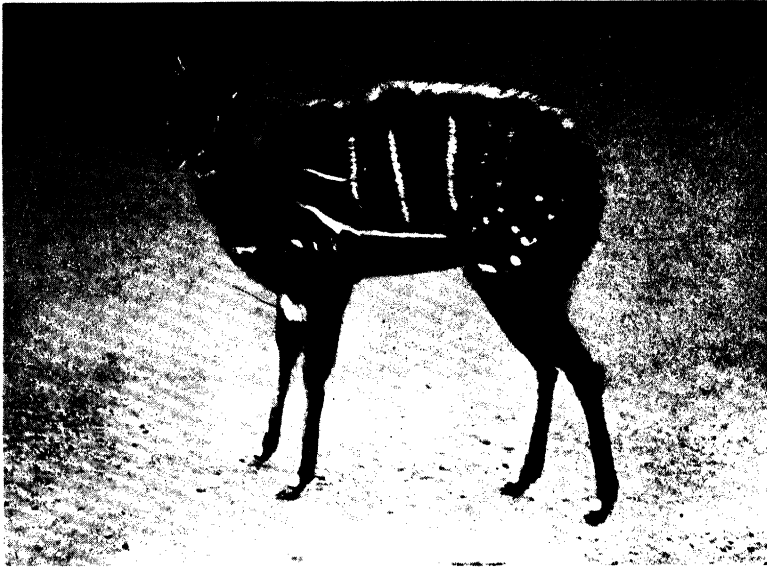
Once, after a spate had come down the Rahad, I found the drowned bodies of twenty-seven together, caught up in the projecting roots of a large tree where the river ran between steep banks of earth.

Matschie, the describer of so many questionable sub-species, has distinguished Ariel from the neighbourhood of Singa under the name of *sibyllæ*.

RED-FRONTED GAZELLE (*Gazella rufifrons lævipes*). Arabic "HAMRA," or "HOMRA" (meaning "RED").—Common across the country between Gedaref and the Blue Nile, but in nothing like the numbers of the last species. Usually in pairs or small parties. They afford rather nice stalking as they wander through open thorn bush, continually wagging their little black tails!

Good average horns run about 11 to 12 inches. The Sudan record is $13\frac{1}{2}$, but the largest heads have come from Kordofan and the White Nile. A buck, heavier than most, which I weighed, scaled 65 lbs.

HEUGLIN'S GAZELLE (*Gazella tilonura*).—This Gazelle, which replaces the last on the Setit and in the upper Atbara valley, resembles it closely in general appearance, but differs markedly in the shape of the horns, which are hooked sharply inwards at the tips, like those of the Ariel. They are generally rather shorter than those of *G. rufifrons*.



BLUE NILE GAME

Plates 28—29

Top. BUSHBUCK OR HARNESSED ANTELOPE.

Bottom. REEDBUCK (R.E. ARUNDINUM).

BOTH THE ABOVE ARE COMMON NEARLY EVERYWHERE IN AFRICA, SAVE IN DESERT COUNTRY.

The name *tilonura* seems meaningless. Perhaps *ptilonura* (with a tufted tail) was what the author intended.

ROAN ANTELOPE (*Hippotragus equinus bakeri*).—The Roan Antelope of the Sudan differs from the Roan of South Africa principally in its browner colour and even longer ears.

Captain Brocklehurst says in his book, "The Roan Antelope, although named after Sir Samuel Baker, who described it in 1867, was first brought to notice by Von Heuglin in 1863." As the sentence may be taken to imply that Von Heuglin was the first to become acquainted with the Sudan race, it may be pointed out that Baker obtained it on the Atbara tributaries in 1862. On reaching Khartoum in the same year he met Von Heuglin, and the two forgathered and compared notes. Von Heuglin gave Baker a copy of a manuscript list of the Antelopes of Abyssinia and the Sudan which he had prepared, and Baker showed him his "Maarif," which was until then unknown to the German naturalist, and allowed him to describe and name it. Baker was unquestionably its discoverer.

The Arabic name for the Roan is *Abu Uruf*, or *Abu 'Ruf*, which means "maned antelope" (literally "father of a mane"). Baker's word *Maarif*, which he gives as the Arabic name, I never heard used, even by the Hamrans on the Setit. Baker's knowledge of the language was at that time very recently acquired, and it does occur to one that *ma aref* means "I don't know," often the prompt answer of an Arab to any question he does not understand.

These magnificent Antelopes—a big bull stands nearly fifteen hands, and weighs over 600 lbs.—are to be met with on the Setit, the Atbara above it, the upper reaches of the Dinder, and the upper Blue Nile. They are plentiful about Semsir and the Khor Galegu. On the Rahad I do not remember meeting with them.

Old bulls are often met with singly, or sometimes two or three together, but Roan are generally in herds of from ten to thirty. On the Khor Galegu I once counted seventy-three in a troop.

On the Setit, in 1861, Baker found them extraordinarily wild, and considered them the most difficult of all animals to stalk. At that period, however, the Setit was more populated than it is now, and the mounted hunters of the Hamran were in their heyday. The Roan were probably far from being unsophisticated, and for long shots the rifles that Baker used were much less effective than the high velocity weapons of the present day.

Roan are keen-sighted, and on an open plain can seldom be approached without a lengthy crawl. This often fails through the herd feeding away from one during the stalk, which they do rather rapidly, but among bush, or when intercepted on their way to water, they may give an easy chance.

On bare ground, where a full view is not prevented by grass, it may be noticed that Roan lying down at rest often have one foreleg stretched out in front of them, or a hindleg extended sideways, or both; in fact their attitudes struck me as much more sprawling than those of most other Antelopes, which usually lie with their legs neatly tucked under them. As Captain Brocklehurst notes, they will sometimes go down on their knees when grazing, just as Wart-hogs do.

The call of a young Roan is a clear bird-like whistle. I once brought a fine young male, which had been caught and reared by the Hamrans,

from the Setit to Khartoum, leading it with my "hamla" as far as Wad Medani. It became very tame, and marched along splendidly, uttering this musical "Whee-oo!" at intervals, with hardly a perceptible movement of its lips.

A Roan when at bay is, like its relative the Sable, a fierce fighter, and, if it has sufficient strength left, may charge unexpectedly and very quickly, dealing sweeping blows with its horns right and left, with all the power of its mighty neck behind them. A wounded one should not be carelessly approached from directly in front. Adult bulls of both these species in captivity are apt to become very savage. There used to be a splendid Sable bull in the Giza Zoological Gardens, and the reckless fury with which it used to crash its horns against the iron railings, apparently without feeling any inconvenience from the shock, made it very clear that the life of an unarmed man entering its paddock would not have been worth a minute's purchase.

There is a good deal of difference in the readiness of different species to use their horns in self-defence. Roan, Sable, Oryx, and even the little Bushbuck, may turn on their attacker savagely. On the other hand I have not seen Kudu, Water Buck, or Kob attempt to defend themselves with their horns. This may not always be the case; it may have been only a matter of chance that it has been my own experience. The only serious accident with a wounded Antelope which I can recall was with a Water Buck. A young Englishman seized a wounded one by a horn, and endeavoured to finish it with a knife. The animal sprang up, and in the rough and tumble which ensued the sportsman sustained a broken leg, a compound fracture which, at a distance from medical aid, resulted fatally.

As both sexes carry horns care is necessary, in shooting Roan, to avoid making a mistake, but, with a little experience, bulls can easily be recognized by their thicker necks, especially when cows are in sight at the same time for comparison.

A fine head has horns of 30 to 32 inches; 33 or over is extra good. I fancy that many bulls never get beyond 28. The Sudan record is a head of 37½ inches, obtained on the White Nile by the late Paul Niedick, but this is quite exceptional. Among hundreds of Roan trophies which I have inspected I never saw another approaching it.

With its black and white mask, stout curved horns, long ears, and erect mane cresting the thick neck, a Roan is a magnificent creature, and a herd of them filing down to a river, and then forming up at a pool in its bed, is one of the sights in Africa.

BUSHBUCK (*Tragelaphus scriptus decula*). Local Name "ABU NEBĀKH."—Bushbuck occur on the upper Blue Nile and across the Dinder and Rahad country to the upper Atbara and Setit. They usually have one white stripe along the side, and another, broken up into a few longish spots, below it, but no distinct transverse white stripes. In this they differ from the race found in the White Nile districts, *Tragelaphus scriptus bor*. They live singly or in pairs, never in herds, and generally keep to the vicinity of water, hiding during the heat of the day in the bush along the rivers, and coming out in the evenings. I have had some interesting "still hunting" for them in this covert, creeping and crawling as silently as possible through their runs in the thorn, and stopping every few yards



Plate 30

A MEMORY OF CAPT. F. C. SELOUS, D.S.O.
ONE OF HIS BEST KUDU, NOW IN NATURAL HISTORY MUSEUM, S. KENSINGTON.

with head bent down to the ground to peer among the stems of the interlacing bushes. Sometimes I made out the legs of a Bushbuck within a few yards, its body invisible through intervening branches. *Very* stealthy moving then became necessary, before one could see whether the animal was a buck, and what sort of a head it had. Manœuvres often ended at this point in a bark and a rush. When one got a shot it was, of course, a certainty, but I always found the game difficult enough, for the odds to be on the Bushbuck.

I remember one buck with a nice head defeating me entirely. I saw it slip into a narrow strip of thorn on the bank of the Setit, perhaps a hundred yards long and twenty wide. After half an hour spent in this thicket I emerged, perspiring, scratched, and stiff from doubling up, just in time to see the little buck land on the other side of the river, shake himself like a dog, sending up a glittering spray of drops in the sunlight, and disappear up the bank.

A Blue Nile Bushbuck weighs about 100 lbs. Good horns measure 12 to a little over 13 inches; 10 or 11 inches would be about the usual average.

Bushbuck from different localities vary greatly in colour and markings, and attempts to classify them have resulted in about thirty different species being described and named. Many of these are of very dubious validity.

The Arabic name refers to the bark which these animals utter when alarmed, just as we call the Muntjac of India the Barking Deer.

KUDU (*Strepsiceros strepsiceros chora*), Local Name "NYELLAT."—The Kudu of Somaliland, Abyssinia, and the Sudan differ from the South African race in usually having only about five distinct white stripes down each side, instead of nine or ten, and have been distinguished under the above name, while the East African form, again, with six or eight stripes, has been separated as another sub-species—*bea*.

They are tolerably common on the Setit, along the Atbara above it, and along the Blue Nile above Sowleil, preferring thick bush in hilly or broken and rocky country, where water is accessible.

Needless to say, with only one allowed on a licence, no Kudu should be fired at unless you can at least see clearly that the horns have the characteristic two and a half twists, and, in thick bush, or when an animal is facing you with its nose up and its horns laid back, this is not always easy to be sure of.

In this position only the curve of the first spiral is visible, and behind it there may be only half a second twist, though the horns may be as thick at the base as those of a fine head.

I lost the chance of a beauty once, at the foot of Jebel Melbis, in Kordofan, through being afraid of making a mistake. For some twenty or thirty seconds he stood facing me, in an opening in thick bush, about 60 yards distant, offering an easy chest shot, and nothing of his horns could I see but the first thick twists. Then he wheeled round and was out of sight in a second, reappearing a minute later some 300 yards away, as he galloped over a shoulder of the hill, and affording a brief but distinct view of splendid long spirals laid back along his withers. I never set eyes on him again, though I hunted for him for two days.

Disappointing as such an incident may be, it is not so mortifying as

finding that you have lost your chance of getting a representative head by killing an animal with half-grown horns.

The best Blue Nile heads which have fallen to the rifle have measured from 52 to 54½ inches on the curve, but I have seen a picked-up head, a Lion's victim, which taped 56½. Captain Brocklehurst records a head from the Mongalla Province of 59½ inches, and horns of the South African race, the finest of all, reaching 71½ and 68 inches.

A good head of this magnificent Antelope is one of the finest of African trophies, and one by no means easily obtained. Females, which seem greatly to outnumber the males, are not particularly wary, nor are young males with half-grown horns, but the comparatively scarce big bulls are adepts at concealing themselves in thick covert, and are cunning in the extreme. Cautious tracking, where the ground is not too stony, quiet "still hunting" in their haunts, or watching a likely stretch of country from a hill in the early morning or late afternoon, afford the best chances of success, but their hearing is very keen, and they will slip away through the bush at the slightest suspicious sound, or stand stock still in a thick patch, and bolt with a rush just as one comes up with them.

One has only to look through the coils of a detached Kudu horn to imagine that it might well assist in conducting sound to the wide ear at the bottom of the spiral. If this be the case it is possible that a bull's sense of hearing may actually be more acute than that of a cow.

After all, there is a large element of chance about getting a good Kudu. You may put in a lot of hard work without seeing a head worth shooting, or have the luck to come across a big bull quite unexpectedly.

The track of a Kudu is, like that of a Bushbuck, spoon-shaped rather than sharply pointed, and small for the size of the animal.

A common tree in this part of the Sudan is *Balanites aegyptiaca*, called by the Arabs "*Heglik*." This has long, straight, green thorns, and a green-stoned fruit, something like a large olive. Now and again, in the bush, you may come upon a small group of seedlings, or saplings of this tree, springing up close together, more or less in the shape of a crescent, and not near any mature tree of the same kind. This marks the spot where a Kudu, after picking up some fallen "*Heglik*" fruits, once lay and dropped the sucked stones from its mouth when chewing the cud.

In Rowland Ward's *Records of Big Game*, it is said that "the Somali form inhabits less thickly wooded country than the southern race, and it is in accordance with this that it has fewer stripes." I am afraid I have no belief in the ingenious theory that five stripes are less conspicuous in thin bush than nine or ten, while nine or ten afford a more protective colour pattern in thicker bush! Nor is it borne out by the coloration of the Bushbucks, animals of very similar haunts and habits, among which the race inhabiting the same bush as the more numerous striped form of Kudu happens to be practically unstriped.

GIRAFFE (*Giraffa camelopardalis*), Local Name "ZERAF."—Giraffes are fairly numerous on the Setit, and on the Dinder, but are not allowed to be shot. Few sportsmen, however, except for museum purposes, would care to kill one.

Many local races have been named. In the Blue Nile animal the large markings on the body extend down the thighs and fore-legs above the

knee, while in Kordofan Giraffes (*G. c. antiquorum*) they break up, on the same parts, into very small spots.

Giraffes are commonly said to be absolutely voiceless, but I have heard a wild bull utter a queer, thin little bleating sound, and a tame one, in captivity, if tantalized with food, will often make a sort of husky whisper, very like the sound made by a thirsty donkey when one approaches it with water.

WART-HOG (*Phacochoerus aethiopicus bufo*), Local Name "HALUF."—Wart-hogs are common throughout the country here noticed, and are usually met with singly or in parties, rooting about, frequently on their knees, after the usual manner of swine. They are often in company with other game on open *mayas*. When alarmed they go off at a quick trot, with their long bristles erected, and their tails straight up in the air. Their ugly heads and prominent upper tusks give the boars a decidedly ferocious appearance, and when surprised at close quarters they often look as if they were about to charge, but they are really, I think, much less formidable than a European or Indian boar.

The sows are bold in defence of their young, and on one occasion one routed me completely. I came on her suddenly, with a litter of very small young ones, which bolted after her into high grass. One of them, being a little apart from the others, ran in a different direction, and, laying down my rifle, I managed to run the little thing down and catch it. The moment I picked it up it started a shrill squealing, which brought the old sow on the scene again in an instant. She came for me without hesitation; I threw my newly acquired sucking-pig towards her and fled, only just avoiding her rush. She then turned and trotted off, tail up, her rescued offspring following her.

HIPPOPOTAMUS (*Hippopotamus amphibius amphibius*), Local Name "GRINTI," "EISINT."—Hippo occur on the Atbara, Setit, Blue Nile, and Dinder. I do not remember having seen them on the Rahad in the dry season. If you are on the land, and the Hippo in the water, there is no sport whatever in shooting these huge beasts, which is merely a matter of accurate target shooting for the brain.

If you happen to be in a small boat a wounded one may charge it, and be dangerous. I have seen a wounded bull attack one of the big sailing boats known as *gyassas*, endeavouring in vain to get hold of the heavily timbered hull with its great jaws.

I once, being an ornithologist, left a steamer which was moored on the Bahr el Zeraf, and dropped quietly downstream, skirting the fringe of grass and papyrus, in a small collapsible canvas boat, taking only a little collecting gun, with the object of obtaining specimens of a particular species of Reed Warbler which I had noticed from the steamer. The boat aroused the curiosity of a school of about twenty Hippos, which closed in on it, drawing nearer and nearer. A shot or two fired over their heads had no effect in keeping them off, and I began to feel uncomfortably nervous. Finally, when a huge bull came up and roared defiance within a yard of the boat, causing it to rock violently, I thought that the collapsibility of my craft would very soon be demonstrated, so turned in to the bank, drew it ashore, and walked back to the steamer.

SUDAN (Continued)

CHAPTER FOUR

THE BIRDS & SOME ANIMALS OF THE BLUE NILE

By A. L. BUTLER

TWO species of Monkeys are met with; the commoner, the greenish-grey one with white whiskers, is the Grivet, while the bright chestnut-red one is the Hussar Monkey.

Troops of Baboons are often encountered, especially on rocky hills, the species being the Anubis. The old males are powerful brutes, with fangs as large as a Leopard's. A party which has detected one waiting quietly near a pool will, sometimes, drawn by curiosity, approach very closely, and make hostile demonstrations, but I never heard of them attacking human beings.

A small Galago, one of the genus of nocturnal Lemurs known as "Bush Babies," may sometimes be seen in the thorn trees at dusk. This is a beautiful little creature, about the size of a squirrel, with soft grey fur, large eyes, and delicate membranous ears. Generally a pair are together. They are wonderful jumpers, and the lightness with which they spring from branch to branch is pretty to see.

One species of Bat (*Lavia frons*) is certain to attract attention by its bright yellow colour and partly diurnal habits. They suspend themselves during the day, not in holes or crevices, but on the branches of shady thorn trees and among the vines that cover them, and as one approaches their retreat they flutter out like big yellow moths.

Of the smaller *Felidæ* the Caracal Lynx and the Serval both occur. The former, the scarcer of the two, is plain rufous in colour and has black, pencil-like tufts on its ears, from which it derives its Arabic name of *Um Rishat*, which means "Mother of tassels." The Serval is yellow with black spots, something like a long-limbed miniature Leopard. Both these cats are very powerful beasts for their size, especially the Caracal, which has a most formidable armament of teeth and claws, and is capable of killing animals up to the size of the smaller Antelopes with ease. One of them attacked a full-grown Goat, which my companion on one trip had tied up for a Leopard, and killed it very quickly. As soon as the struggling animals were still, a soft-nosed bullet from a .450 Cordite almost annihilated the Caracal, when we found its jaws locked so tightly in the throat of its victim that they were with difficulty prised open with a hunting-knife. I have known a Serval to kill a full-grown male Ariel.

Civet Cats and the little, lithe, long-tailed Genet are common, as are two or three kinds of Mongoose, of which the large brown, white-tailed species is most often met with.

A rare and interesting little beast is the Aard Wolf (*Proteles*), which has a superficial resemblance to a miniature Striped Hyena, but has a quite different dentition.

Hyenas are numerous, the large Spotted species more so than the Striped. Rocky hills are a favourite stronghold, from which they travel long distances during the night. Some of the thorn-choked "khors" and rocky clefts along the Setit literally stink of them. They are often very bold in coming into a camp under cover of darkness, and trophies such as skulls and skins, if not placed in a tree or other safe place, are liable to be carried off by them, while donkeys are sometimes attacked and terribly mauled.

Wild Dogs (*Lycaon*) are much less common, fortunately, as they are most destructive to game, but one sometimes comes across a pack. They have a habit of standing straight up, or jumping above the high grass, to have a look at one before making off. When running an animal they utter short sharp barks, but their call to each other is very curious, a soft, low "coo-whoop," which might easily be taken for the note of some kind of Dove or Pigeon. The colour of the African Wild Dog is a patchy mixture of black, yellow, and white, with the tail mostly white; the ears are erect, very large and rounded. Newly born cubs are a uniform blackish liver colour.

Jackals and Foxes also occur. The former are, I think, less gregarious and less vocal than the Indian species, though the nocturnal concert so familiar to all who have lived in that country is sometimes heard. In the heat of the day I have often seen one lying under the shade of a bush, panting, with the tongue hanging out. On one occasion I had left my rifle leaning against a tree for a few minutes, and on returning to it found a Jackal standing by it, licking the barrel, the attraction, presumably, being the smell of gun oil.

The quaint little Ratel, or Honey Badger, grey above and black below, I have met with two or three times, trotting along in its own unconcerned manner. It has the reputation of being a most determined fighter if molested, attacking the legs of its pursuers and biting severely.

To the same family belongs the Striped Polecat (*Ictonyx*), a very pretty little beast, coloured black and white in longitudinal stripes, whose first line of defence is the appalling smell which it can emit from certain glands. The power of this stench, like that of the American Skunk, has to be experienced to be believed. It is nauseating to a degree, making the throat contract and the eyes stream. When not alarmed the animal is as clean as a kitten.

Of rodents the largest is the Porcupine, common, but very nocturnal. A brown Ground Squirrel (*Xerus*), with short harsh hair and a pale stripe along the side, is often met with; the Arabs call it "Geheff."

A very attractive little Dormouse (*Graphiurus*) has grey fur as soft as Chinchilla, and a bushy tail. I caught one once, running up and down the leaves of a plantain tree in a garden at Roseires. So tame and pretty was it that I made a cage for it out of a wooden box; next morning the box had a hole in it, but no Mouse.

Some of the hills near the Blue Nile, Fazogli, for instance, are inhabited by colonies of Hyraxes, or Rock Rabbits, which may be seen sunning themselves on the rocks during the day. They have, however, no relation to rabbits or rodents, but represent a curious family of their own.

The last animals which need be mentioned are two remarkable Ant-eaters, widely different in appearance, the Ant-bear, or Aard Vark, large in size, with nearly hairless body and thick tail, rather like a Wallaby in shape, and the smaller Pangolin, or Scaly Ant-eater, armoured all over with large overlapping scales of horn. Both are provided with very powerful claws, for digging into the hard clay "nests" of the termites on which they feed, and have surprising muscular strength.

Flowing between firm, dry banks, these rivers cannot show the wonderful assemblages of the larger water birds which may be seen along the marshy margins of the White Nile, but a great variety of interesting birds, many of them of brilliant plumage, will be met with in the course of a trip. A brief mention of some of the most noticeable species may assist the sportsman, who finds himself among African birds for the first time, in recognizing them.

The common Crow is a handsome black and white species, which is soon in evidence when a camp is made. They seldom go far from water, and their presence when one is travelling away from the river is a sure sign that one is nearing the wells of a village.

A fork-tailed black bird is one of the Drongo Shrikes (*Dicrurus*).

Two Golden Orioles, the males bright yellow with black wings and tail, occur; the European bird on migration, and a resident form.

Very conspicuous are the Glossy Starlings, metallic green and blue, with brilliant golden eyes; one with purple-blue plumage (*Lamprolornis*) has a long tail like a Magpie; an oil-green, short-tailed bird (*Spreo*) is chestnut beneath; most beautiful of the group is the Amethyst Starling (*Cinnyricinclus*), whose glittering plumage, violet in one light, puce in another, is set off by a snow-white belly. On Jebel Fazogli the Red-winged Rock Starlings (*Onychognathus*) are sure to be met with, flying in pairs, black, with chestnut wings, and long pointed tails.

Two or three species of Weaver Birds (*Ploceus*) are very abundant; they breed in colonies, and, in places, their retort-shaped, grass-woven nests hang from the trees in hundreds. The males in the breeding season assume a bright dress of black, green, and yellow. Allied to these are a number of small birds such as the little brown Silverbills (*Aidemosyne*), with lead-coloured beak; the Cordon Bleu (*Uraginthus*), delicate blue and dove-colour, the males with a crimson patch on the cheeks; tiny crimson Fire Finches (*Lagonosticta*); blue-black Indico Finches (*Hypochera*); Pytelias, yellowish green, with scarlet faces; Cut-throats (*Amadina*), named from a slash of crimson across the neck; Bishop Finches (*Pyromelana*), the hens dull as sparrows, the cocks gorgeous in vivid scarlet and velvet black; Pin-tailed Whydahs (*Vidua*), black and white, with coral bills and long, thin tails, and Paradise Whydahs (*Steganura*), black and chestnut, with two long and very broad feathers set edgewise in the tail. Many of these are extremely tame and familiar, frequenting the thorn zaribas round the villages, and freely entering huts and verandahs to drink from the earthenware water jars.

Groups of large stick nests in trees, which look like the work of something

at least as large as a Crow, are made by the Buffalo Weaver (*Textor*, or *Bubalornis*), a coal-black bird, about the size of a Hawfinch, with an ivory-white bill.

Still another bird of this group, conspicuous by the immense flights in which it gathers, is the Red-billed Quelea. A flock of these may consist of tens of thousands, which stream down to a drinking place with the density of a flight of locusts. Such a flight never visits a drinking place without losing some of its members. Crocodiles snap them up in mouthfuls as they crowd on to sprays overhanging the water. I have seen a Lanner Falcon stoop into a crowded cloud of them as they crossed the river, and take one in each foot, the downward rush of the panic-stricken flock knocking hundreds of the lower birds into the water. They rose again easily enough (most small birds, if not saturated, can rise off water), but, during the few seconds when the surface was strewn with them, the *Kass* were taking them like flies.

Of Buntings (*Emberiza*) the famous Ortolan, and a rather similar species, Cretzschmar's Bunting, may be met with in winter, as well as one or two resident species.

A grey-headed Sparrow (*Passer*) is common in the bush. I do not know how far up the Blue Nile the form of House-Sparrow found in Khartoum may have spread by now.

Most of the country is hardly open enough for Larks, but a dark-coloured species with some white on the tail (*Mirafr albicauda*) is found on the cotton soil, as also is a small finch-like Lark (*Pyrrhulauda*), with black head and breast and white cheeks.

On rocky parts of the rivers the White-winged Wagtail is a resident, but the commonest *Motacilla* is the European White Wagtail, on migration. Tawny and Red-throated Pipits are also winter visitors.

The little Sun-birds (*Nectariniidæ*) are sure to attract attention by the brilliant shining plumage of the males. In the two commonest the central tail feathers are elongated. These are the Metallic (green and amethyst, with yellow breast), and the Beautiful (rifle green, with red and yellow patch on breast), while on the upper Blue Nile the short-tailed Coppery and Blood-breasted Sun-birds are found, the first reddish-bronze, the second velvet-black with glittering green cap and moustache, and scarlet breast spangled with blue. Common also is a *Zosterops*, greenish-yellow with a ring of white feathers round the eye. A Black Tit (*Parus*), with white shoulders, has much the same habits as an English Great Tit, and there is a minute Penduline Tit (*Anthoscopus*) which makes a wonderful little nest, like a purse of finely woven felt.

Several typical Shrikes (*Lanius*) occur as winter migrants, including the Red-backed, the Woodchat (with chestnut head), the Nubian (black and white), the Lesser Grey, and the Isabelline. Of the African Bush-Shrikes (*Laniarius*), one is a glossy black bird with brilliant scarlet underparts, which frequents thick bush, and has a loud melodious whistle (*L. erythrogaster*). Another is black and white (*L. æthiopicus*). The curious Helmet-Shrike (*Prionops*) has the feathers of the forehead compressed into a ridged crest. These are black and white birds, with rather broad rounded wings, and are almost always in parties.

Many European Warblers (*Sylviidæ*) winter in the Sudan, such as White-throats, Chiff-Chaffs, Black-Caps, Reed-Warblers, and others less familiar.

Of African species there are small Grass-Warblers (*Cisticola*), inconspicuous little brown birds with rounded tails; an elegant little *Eremomela*, green and yellow, with grey head; and a tame green and grey Bush-Warbler (*Camaroptera*), with very short tail. Near these comes a small, bob-tailed bird, grey above and rufous beneath (*Sylvietta*), which can be recognized by its habit of climbing about the branches of trees, much as an English Nuthatch does.

One African Thrush (*Turdus*) is found, a plain-coloured bird with rufous orange flanks, while the Common and Blue Rock-Thrushes (*Monticola*), and the Redstart are winter migrants.

A handsome Robin-Chat (*Cossypha*) grey above, with white crown and chestnut tail and underparts, is shy and not very common. It lives under thick cover, but can easily be whistled up by an imitation of its note. On Jebel Fazogli there is a fine Cliff-Chat (*Thamnolea*), black, white, and chestnut, which I have not met with elsewhere on the Blue Nile. Wheat-ears (*Enanthe*), recognizable by the white on rump and tail, are represented by several species, most of them migrants.

A brown, white-headed bird, which goes in noisy parties, is one of the Babblers (*Crateropus*).

Bulbuls (*Pycnonotus*), frequent the gardens of the different Blue Nile towns, dark-coloured, black-headed birds, with bright golden yellow under the tail.

A glossy black bird with yellow shoulders is the male of a Cuckoo-Shrike (*Campephaga*); his mate is grey and yellow.

The beautiful Paradise Flycatcher (*Tchitreia*), white, with steel black head, and two tail feathers like long white ribbons, is a bird which no one could fail to notice. This is the plumage of the adult male; the female and immature birds are chestnut, and shorter tailed. An entirely black Flycatcher (*Melanornis*), and a small black and white species (*Batis*), in which the males have a black, and the females a chestnut belt across the breast, may also be mentioned.

Of Swallows (*Hirundinidae*), the familiar English bird occurs in winter, as well as the House Martin and Sand Martin. There are also some resident African species, of which the most noticeable are the Ethiopian Swallow, something like the English bird, but smaller, whiter beneath, and with a shorter tail; the Wire-tailed Swallow, steel blue with chestnut head, and long, very thin, outer tail feathers; and the Senegal Swallow, a larger bird with chestnut on back and underparts, fond of frequenting the big baobab trees.

The commonest of the Woodpeckers (*Picidae*) is the Nubian (*Campethera*), blackish olive above, with whitish spots and bars, yellowish white below, with black spots, and with crimson crown and moustache. A small brown and white species (*Yungipicus*) is about the size of a Sparrow.

The Wryneck (*lynx*) is a winter migrant.

Of Barbets (*Capitonidae*), Vieillot's, brown and sulphur-yellow, with red face, is the commonest. Another of the same genus (*Lybius*) is the Abyssinian Barbet, black with scarlet face. A miniature species is black and yellow, with a golden-orange forehead (*Pogoniulus*), while the Pearl-spotted Barbet (*Trachyphonus*) is brown and yellow, spotted with white, and with scarlet above and below the tail.

Barbets are stoutly built, strong-billed birds, with feet like those of a

Woodpecker, but they do not climb trees in the same way, and have not the stiffened and pointed tail feathers of a Woodpecker.

Near them come the famous Honey-Guides (*Indicatoridæ*). Three species are found in the Blue Nile districts, of which the Black-throated is the commonest. This is the bird originally described by Sparrman, who became acquainted with it in South Africa in 1777. It is a small, greyish-brown bird, with a black throat, whitish underneath, and with a good deal of white in the tail. When they have found a bees' nest they remain in the vicinity of it, uttering an excited chattering, and returning to it at short intervals. By watching and following the bird honey will often be found.

Of the Cuckoos (*Cuculidæ*), there are three crested species of the genus *Clamator*, the chestnut-winged Great Spotted Cuckoo, and the two smaller black and white species, while our familiar English bird occurs on migration. There is also a beautiful small Metallic Cuckoo (*Chrysococcyx*). All these lay their eggs in the nests of other birds, but the Coucal, or "Crow-Pheasant," a rather large bird, blackish with rounded chestnut wings and a long hind spur like a Lark, is not parasitic (*Centropus*).

The *Musophagidæ* (Plantain Eaters) are represented only by a large grey species (*Crinifer*).

A very beautiful Trogon (*Apaloderma*), beetle-green above and with scarlet breast, may be met with on the upper Blue Nile. The scientific name, meaning "tender skin," is certainly appropriate. It is a very difficult bird to preserve, the skin being as easily torn as macerated tissue paper. Quantities of feathers often come out when the bird falls to a shot, and the remainder follow rapidly when an inexperienced enthusiast begins to skin it.

A purely African family are the *Coliidæ*, or Mouse-Birds, quaint little brown birds with crests and long stiff tails. There are two local species, one with a blue patch on the nape, and the other with white cheeks.

A small Palm Swift (*Tachornis*), is often abundant about "Dom" palms, to the hanging fan-shaped leaves of which they attach their nests. The two white eggs are glued by the saliva of the bird to the bottom of the nest, which prevents them from falling out, however much the great leaves sway in the wind. Among others of this family (*Micropodidæ*), the large Alpine Swift, white beneath, and the Common Swift, may be recognized, as well as a small African species with a white rump.

Among the Nightjars (*Caprimulgidæ*) which occur, the most striking is the wonderful Standard-winged species (*Macrodipteryx*), in the males of which the ninth feather in each wing is a long flexible bare shaft, ending in a broad, black, racket-like web. In the dusk the wire-like shaft is invisible, and the bird looks as if it were being chased by two smaller ones.

Of the brightly coloured Bee-eaters (*Meropidæ*) there are seven species on the Blue Nile, belonging to two genera, *Merops* and *Melittophagus*. In the first the central tail feathers are elongated, projecting beyond the others as two long points, in the second they are not. In the first group are the Common Bee-eater (with chestnut head and yellow throat), the Persian (with green head and blue cheeks), the Nubian (rosy red with pale blue rump), the White-throated (with black head, white throat and eyebrow), and the Green (smaller, green with black line through eye). The others are the Little Bee-eater (green with yellow throat) and the

Red-throated (blue, green, and scarlet). This last, and the Nubian, breed in colonies in the banks of the rivers, making holes as Sand Martins do.

A long-tailed blue-black bird, with curved coral-red bill, is the Red-billed Wood-Hoopoe (*Irrisor*). They travel in parties, and have a harsh chattering note. A smaller bird of the same group (*Scoptelus*) has a black bill, and is not so gregarious.

The Common Hoopoe, unmistakable by its plumage of fawn colour, black and white, and beautiful crest, is a winter visitor. There is also a resident African race.

The Hornbills (*Bucerotidae*) are represented by the great Abyssinian Ground Hornbill, black with white wings, and by two small arboreal species, one with a red, and one with a black and yellow bill.

Half a dozen different kinds of Kingfishers (*Alcedinidae*) may be met with on these rivers. The common pied species has the habit of hovering over the water with bill pointed downwards and wings flapping rather slowly, before diving down upon a fish. The Great African Kingfisher, a much larger and less abundant bird, is slate-grey spotted with white, and with some chestnut underneath. Though belonging to the same genus (*Ceryle*) as the last, it has not got the same habit of hovering over water. The Little Crested Kingfisher (*Corythornis*), blue with white throat and chestnut breast, has a long crest of malachite-green feathers, barred with black, and is common. Very similar in colour, but lacking a crest, is the tiny Painted Kingfisher (*Ispidina*), a lovely thing, with coral-red bill and peach-coloured cheeks. Larger and more conspicuous is the White-headed species, black and bright azure blue, with greyish white head, and rufous under parts. This and the Chelicut Kingfisher, a smaller, duller bird, grey and greenish blue, belong to the genus *Halcyon*. The last three are bush-frequenting birds, by no means confined to the immediate neighbourhood of water.

Of Rollers (*Coraciidae*) the European and the Abyssinian both occur. They are very similar in colour (azure, dark blue, and fawn), but the second has the outer tail feathers long and narrow, like those of a swallow. The darker-coloured Broad-billed Roller (*Eurystomus*) is found along the upper Blue Nile.

The green Ring-necked Parroquet (*Palæornis*) and Meyer's Parrot (*Pocephalus*), a smallish, thick-set bird with short tail, brown head, and yellow forehead, which keeps mostly to the big "tebeldi" trees, seem to be the only members of the *Psittacidae* in this part of the Sudan.

Owls are fairly numerous, but one usually only sees those which one happens to disturb in the daytime. The largest is Verreaux's Eagle Owl (*Bubo*), a very powerful bird. The commoner Abyssinian Eagle Owl is smaller. There are two small Scops Owls (*Otus*), the Common and the White-cheeked, either of which may sometimes be found asleep in a thorn bush, and the little Pearl-spotted Owlet (*Glaucidium*), brown spotted with white, and without the ear-tufts which the others possess. One of the many forms of the familiar Barn Owl (*Tyto*) also occurs.

Birds of prey are so numerous that it is only possible to mention here some examples of those that may be met with. Of the Falcons, those princes of the air, the commonest is the Abyssinian Lanner, which is fond of resting on the "baobab" trees along the Blue Nile, from which it can raid the dense flights of Weaver-birds coming to drink at the river. It is,

however, to a falconer's eye, a slacker flier than the splendid Peregrine, which is represented by various races. Now and again the Hobby will be recognized, and, wherever there are "Doleib" palms, the dashing little Red-headed Merlin will be in evidence. Of Kestrels there are the Common, the Lesser, a fine African grey species, and the pretty little Red-footed Kestrel. (*Tinnunculus*, *Dissodectes*, and *Erythropus*.)

Open country is favoured by the small Black-winged Kite, a bird of gull-like colouring, pearl-grey above and white beneath, with ruby red eyes. Closely allied to this is the exquisite little Swallow-tailed Kite (*Chelictinia*), similarly coloured, a scarcer bird. The common large scavenging Kite of the Sudan is a race of the Black Kite (*Milvus migrans*).

Eagles are numerous, but the different species are not easily distinguished by anyone but an ornithologist. Unmistakable, however, are the white-headed Vociferous Fish-Eagle, met with along the rivers (*Haliaetus*); the almost tailless Bateleur (*Terathopius*), chestnut, with the heavily hooded head and underparts black, the underwing white, and bill and feet red; and *Lophoætus*, a black Eagle with a long crest, which shows some white on the wings in flight.

Two Buzzards (*Buteo*) occur, and three Sparrow Hawks (*Accipiter*), of which one is the European bird, and another a remarkably small species.

Two Chanting Hawks (*Melierax*) are common, the larger a blue-grey bird with red cere and legs, the smaller a darker species, with a patch of white at the root of the tail. The small black Hawk occasionally seen is a not uncommon melanism of the last.

The Pallid Harrier (*Circus*), in which the adult males are pearl-grey and white with black wing-tips, and the Marsh Harrier, are both numerous in winter, while on the Blue Nile the Osprey (*Pandion*) may sometimes be seen, splashing into the water and rising with a fish in its feet.

A very curious large grey Hawk found on the upper Blue Nile (*Gymnogyps*) has much the colouring of a Secretary Bird.

The huge Vultures which assemble so quickly when an animal has been killed cannot fail to attract the interest of every sportsman. Much has been written as to whether these birds find a carcass by sight or by smell. My own experience leads me to believe that, while the Vultures of Europe, Asia, and Africa depend entirely upon sight, the American Turkey Buzzards and their allies, not true Vultures, strictly speaking, have a wonderful power of scent, which will guide them to carrion quite concealed from view. The scuffling crowd of these great scavengers around a large dead animal is an extraordinary sight, and is often composed of several different species. One of the largest and handsomest is the White-headed Vulture (*Trigonoceps*), dark brown, with downy white head, and belly and inner part of wings white. Another, Ruppell's Griffon (*Gyps*), is dark ashy brown, with pale crescent-shaped edges to the back feathers, and a whitish ruff. Largest of all is the Nubian Lappet-faced Vulture (*Torgos*), dark brown with bare head and neck. Of lesser size than those mentioned is the White-backed species, dark brown, with lower back and ruff pure white, and smaller still is the Egyptian Vulture (*Neophron*), white with black wings, yellow face, and hackled neck, plentiful round every town and village. There are probably one or two other species. Good specimens of the larger Vultures would always be acceptable at the Natural History Museum, as most collectors fight shy of the nauseating task of skinning

these foul-smelling great birds. It may be said in their favour that they are regular daily bathers, soaking themselves thoroughly, and keeping the white down of their heads and ruffs spotlessly clean.

Near the Vultures comes the well-known Secretary Bird, which will occasionally be met with on open country. This tall, long-legged raptor, with its grey plumage, crested head, and long tail, is a rapid runner, and can keep its distance without taking to flight.

When attacking a snake it rushes at it with wings spread, and kills it by a succession of stamping kicks, the sound of which can be heard for some distance.

Of *Pelecanidae* two species frequent the Blue Nile, the White and the rather smaller Pink-backed Pelicans. Immense numbers sometimes congregate on the lagoon at Ras Amir, on the Dinder.

The curious Darter (*Anhinga*), a diving bird allied to the Cormorants, is recognizable at once by its extremely thin, long, snake-like head and neck, often the only part of the bird visible as it swims along with body submerged. It looks as if the bird were able to alter its specific gravity so as to swim at will either with its body half above water, or with only its head and part of its neck above the surface, though how this is done I have no notion.

A small White-breasted Cormorant (*Phalacrocorax*) is very common.

Coming to the Ducks and Geese (*Anatidae*), many species with which the European sportsman will be familiar are more or less abundant in the Sudan in the winter. Among these are the Ruddy Sheldrake, Mallard (scarce), Common and Garganey Teal, Pintail, Shoveler, Widgeon, Tufted Duck, Ferruginous Duck, and Pochard. These migrants, in the spring, just before their return journey north, become loaded with fat to a remarkable extent; the plumage of a shot bird is often saturated with oil which has escaped through the shot wounds before it is picked up.

Of African species the largest is the Spur-winged Goose (*Plectropterus*), black and white with green and blue reflections, and pink bill; it has a prominent horny spur on the bend of the wing. Of similar colours is the Comb Duck, or Knob-billed Goose (*Sarkidiornis*), a smaller, but large bird, with black bill, and a large knob at the base of it. Neither of these can be recommended as table delicacies. The well-known Egyptian Goose (*Alopochen*), fawn colour, chestnut, white and black, is common along all the rivers. Better birds for eating purposes are the rounded-winged black and chestnut Tree Ducks, or Whistling Teal (*Dendrocygna*), of which there are two kinds, one with a white face being the commoner.

Hérons (*Ardeide*) are well represented, and include the Common Heron, a Black-headed species rather like it in size and colour, the big Goliath, and the small Purple Heron. Of the Snow-white Egret the Great and the Lesser (*Casmerodius* and *Egretta*) both occur. The Buff-backed Egret (*Bubulcus*), white with buff on back and breast, is a common attendant on cattle and Buffaloes, and the Squacco Heron (*Ardeola*), with brown body and white wings, usually keeps to the margins of pools and khors. When at rest this bird is very inconspicuous, but the moment it takes to flight the white wings catch the eye. In Ceylon the Tamil coolies used to call it the "blind bird," using the word meaning "blind" in the sense of "invisible."

A small black-headed Green Bittern (*Butorides*), and in winter the Little

Bittern (*Ixobrychus*) are fairly frequent, while occasionally a Common Bittern (*Botaurus*) on migration may be met with.

The Night Heron (*Nycticorax*), a rather thick-set bird with black back, grey wing and tail, white underparts, and long white crest, also occurs, and an African species with a white mark on the black back and chest. It has also been recorded from the Blue Nile, though I never came across it on that river or its tributaries.

A curious and common bird is the Hammer-head, dark brown with a heavy crest, which gives the bird's head the appearance of a pick.

The White Stork (*Ciconia*) is a winter visitor. Of the African species the most plentiful is Abdim's Stork (*Abdimia*), a smaller bird, black with white rump and belly, which breeds in colonies on the roofs of the "tukls" (conical huts) in native villages, and on the neighbouring trees. The huge Adjutant (*Leptoptilus*) descends with the Vultures whenever an animal has been killed, and takes a keen interest in Buffalo heads and similar trophies lying about in a camp. Much scarcer is the big Saddle-billed Stork, a really magnificent bird, black and white, with red and black bill, on which there is a saddle-shaped wattle of bright yellow. It is generally seen in pairs on open, marshy ground. Two other remarkable Storks, of gregarious habits, are the Open-bill (*Anastomus*) and the Wood Stork, or Wood Ibis (*Pseudotantalus*). The former is an entirely black bird with many of its feathers ending in curious horny appendages, like fine shavings of shining jet. When its bill is closed the edges of the mandibles do not come in contact, but show an open space between them. The Wood Ibis has the down-turned bill yellow, the face red, the wings and tail greenish black, and the body white suffused with pink.

Both the Common and African Spoonbills (*Platalea*) occur, the red legs and face distinguishing the African bird.

The Sacred Ibis of the ancient Egyptians (*Threskiornis*) is white, with naked black head and neck, curved bill, and purple black plumes on the back. The Hagedash (*Hagedashia*) with plumage of bronzy-brown, and the Glossy Ibis (*Plegadis*) are commonly met with, while the black Crested Ibis (*Comatibis*) has been seen on the Blue Nile, a black bird with red bill, bare face, and a crest of long, narrow feathers.

Three species of Cranes (*Gruide*) are common. The most striking of these is the splendid Crowned Crane (*Balearica*), blackish grey, white, and chestnut, with beautiful straw-coloured crest on the head. The Common Crane (*Megalornis*), and the Demoiselle (*Anthropoides*) are winter visitors, generally met with on the "dhurra" fields, or seen passing over in large flocks, their musical cries giving notice of their approach. Of these two large blue-grey birds the Demoiselle is the smaller and more graceful, and distinguished by the curving white plumes on the sides of the head.

The large Arabian Bustard (*Choriotis*) is fairly numerous, and several may be seen in the course of a day. It is a magnificent bird, big males having a wing spread of seven feet, and sometimes exceeding 20 lbs. in weight. As a rule they are wary, and require to be stalked with the rifle, but occasionally one will fly over, or rise in long grass, within easy shot-gun range. Much smaller is Hartlaub's Bustard (*Lissotis*), in which the males are conspicuous by their black underparts and the amount of white on their wings, while the females are brown. They allow a much nearer approach than the large species, and afford an easy shot for the gun.

The Plover family (*Limicolæ*) is so numerously represented that individual mention of all the species cannot be made here.

The Senegal Stone Curlew (*Edicnemus*), common along the rivers, is very like the English Norfolk Plover; the graceful Pratincoles, or Swallow-Plovers (*Glareola*) may be seen hawking insects over the crops; the beautiful little Egyptian Plover (*Pluvianus*), with its dainty plumage of blue-grey, black, white, and buff, is to be seen on almost every sandbank along the rivers, running with the swiftness and smoothness of the Courier Plovers (*Cursorius*), to which its close affinity is shown by the colouring of its eggs and its downy young. This bird, the Crocodile Bird of the ancients, not only buries its eggs completely in the sand, but conceals its chicks in the same way. The sandy-coloured Courier Plover, or Courser, above mentioned, is to be found on the desert country bordering the lower parts of the Blue Nile, but does not extend to the upper portion of the river.

The Ruff (*Philomachus*), in its winter plumage, which resembles that of the Reeve, and is entirely without the frills and ear tufts of varying colours which make the breeding dress so remarkable, collects in large flocks on the stubbles of "dhurra" fields, and these grain-fed birds are excellent eating.

A host of migrants from the north visit the Sudan in winter, and, though the White Nile is more favoured by them, many are to be met with here and there on the eastern rivers, in suitable localities. Snipe, Curlew, Sandpipers, Marsh, Common, and Wood Sandpipers, Green-shanks, Redshanks, Stints, and Ringed Plovers are among these, as are the white-headed Black-winged Stilt, with its long pink legs, the Avocet, with slender upturned bill and cleanly contrasted plumage of black and white, and the well-known Curlew.

Occasionally, in some marshy patch, one may flush the Painted Snipe (*Rostratula*), with round buff-coloured spots on its grey wings, but it is not a common bird locally.

The White-tailed, Sociable, Kentish, and Asiatic Plovers occur on migration, while common resident species of about the size of a Lapwing are the Spur-wing Plover (*Hoplopterus*), black, white, and olive-brown, and the Red-wattled Lapwing (*Sarciophorus*).

Of Gulls (*Larus*) the Lesser Black-backed and the Black-headed occur on the Blue Nile, but are far from being common.

The very curious Skimmer (*Rhynchops*), black above, white beneath, allied to the Terns, has a bill in which the lower mandible is flattened like a paper-knife, and projects far beyond the upper. It flies just over the water, in parties, just cutting the surface with its bill, and breeds on the Blue Nile sandbanks.

The Gull-billed and large Red-billed Caspian Terns (*Sterna*) wander up the river in winter, as do some smaller Terns of the genus *Hydrochelidon*.

Grebes (*Podicipidæ*) seem only to be represented by an occasional Dabchick of the African species on the Blue Nile.

Of the Rails (*Rallidæ*) an occasional Coot, Moorhen, Landrail, or Spotted Rail, may be met with in winter.

Pigeons and Doves are numerous. A green Pigeon (*Vinago*) represents the fruit-eating *Treronidæ*, and a maroon-backed bird with white spots is the Guinea Pigeon, a *Colomba*.

Three or four kinds of Doves belong to the same genus as the familiar Turtle Dove (*Streptopelia*), which occasionally occurs among them on

migration. The very small Long-tailed Dove (*Æna*), the males with black face and throat, is abundant about the villages, while a Wood Dove (*Turtur*), often met with on the roads and tracks, can be recognized almost with certainty by its trick of raising and lowering its tail whenever it alights on the ground. Both these last have a spot of metallic violet on the wing.

On the lower parts of the Blue Nile, where there is barren desert country near the river, two species of Sand Grouse (*Pterocles*), the Senegal and the Black-bellied, visit the sand banks to drink during the early morning. They come in great numbers, pack after pack, and afford excellent shooting, being strong and fast fliers. On the bushy cotton soil country their place is taken by another species (*Eremialector*), the Four-banded Sand Grouse, with belts of chestnut, black, and yellow across the breast. This has not the long, pointed centre tail feathers of the last two birds, and drinks in the dusk of the evening instead of in the morning.

Coming to the true Game Birds—the *Phasianidæ*—Guinea-fowl (*Numida*) abound, but of only one species, which appears to be the bird described by Linnæus as *N. meleagris*. In some places on the Setit, if one stands down in the river bed and has the birds driven across it, they give high overhead shots, but elsewhere it is difficult to get very sporting shooting out of them. They are excellent for the pot, and nearly always obtainable when wanted.

A few Quail (*Coturnix*) may be met with in winter, but in nothing approaching the numbers which visit Egypt, and a handsome Partridge with black drop-shaped markings on the breast, and red legs, fairly plentiful, is Clapperton's Francolin (*Francolinus*).

The Ostrich (*Struthio camelus*) closes the list. They are not numerous, and the killing of them for sport is rightly prohibited, but the occasional sight of the largest of living birds adds greatly to the interest of a shooting trip.

SUDAN (Continued)

CHAPTER FIVE

THE WHITE NILE

By COLONEL J. L. F. TWEEDIE, D.S.O.
Sometime District Commissioner

“A THOUSAND miles of shooting, good and varied sport on both banks, etc.” So might run an advertisement on the prospects and pleasures of sport along the Nile south of Khartoum. For nowhere else in the world would it be possible to steam or sail through the heart of a country for such a distance, and so seldom be out of sight of game.

Save for a short and uninteresting tract between Kodok and the mouth of the Sobat, either one or other of the river banks is adjacent to good game country.

The first two hundred miles after leaving Khartoum is a veritable paradise for the wildfowler. It is impossible to convey adequately any idea of the vast throngs of Wild Geese, Duck, Storks, Pelicans and Waders of every sort, which forgather along the shoals and shallows of this desert stretch. When the railway bridge spanning the river above Kosti is reached, the scenery begins to change. Groves of “Sunt” and acacia fringe the banks. Crocodiles lie agape on the mud banks and the silence of the previous nights is broken by the grunting of Hippos.

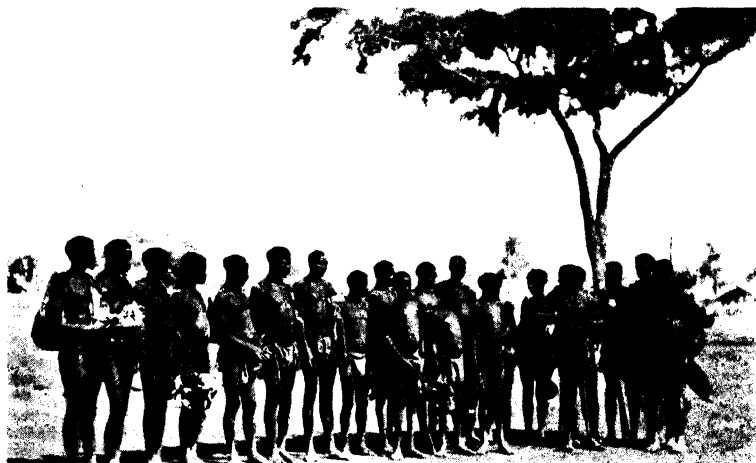
For the next two hundred miles or so the river runs its course through an excellent game country. Passing the Sobat River the Nile takes a westerly bend to Lake No: thence turns south again, traversing the Sudd region as far as Bor, when it again becomes possible to land at one’s pleasure, with the prospect of acquiring a pair of first-class tusks, for all this land is famous Elephant country.

By this time the haunts of Buffalo, Roan, Hartebeest (two species), Tiang, Waterbuck, Mrs. Gray’s Lechwe, White-eared Kob, Bushbuck, Reedbuck, Red-fronted Gazelle, Oribi, Situtunga, White Rhino have been passed, though, of course, it is extremely improbable that in a single trip warrantable heads of all the above would be added to the bag.

Lion are numerous all along the banks and the nightly concerts are a pleasurable feature of this river journey.

Of all its numerous tributaries the Bahr el Ghazal River is the most important, while the Bahr el Zeraf, though not a tributary, will, owing to the comparatively open nature of the terrain, afford as interesting a stretch as there is in the country.

Along the Bahr el Ghazal Situtunga are fairly numerous but seldom seen and more rarely shot. For one thing it is difficult to pick them up, as their pelts blend so well with the dry grass and tangle of dead papyrus stalks. With the exception of an occasional doe with fawn they feed singly and



Plates 31—32

WHITE NILE

Top. GIANT ELAND, *T. DERBIANS CONGOLANUS*.

NOTE THE MASSIVENESS OF THE HORNS OF THIS BULL AND THE FOREST COUNTRY HE INHABITS AS AGAINST THE HORNS AND HOME IN THE PLAINS OF THE COMMON ELAND.

Bottom. GROUP OF NYAM NYAM NATIVES AT WAU', S. SUDAN.

FROM SUCH MEN ARE ONE'S PORTERS RECRUITED.

with the minimum of movement. But long and patient spying with a good pair of binoculars, at dawn and late evening, will almost surely bring its own reward. The spying must be done from a boat, as much for the advantage of a raised vantage point as for silent, steady movement. It is not till one lands to press home the stalk or search, after a spy, that one realizes the hopelessness of ordinary hunting on foot when after Situtunga. In some parts of Africa it is possible to "beat" for Situtunga, or to drive them out by firing likely belts of long grass, by river or swamp, but the Bahr el Ghazal country seldom lends itself to this method. The area is too vast; it is too much like looking for the needle in the haystack.

It may not be out of place here to sound a note of warning to the newcomer. Man in this country has one very deadly enemy and that is the sun. A stout topee and spine pad are essential, the heat is terrific and the going over sun-cracked, black cotton soil, or treacherous swamp, exhausting to a degree. Over-exertion should be guarded against, for once fever has got hold of you and you persist, the Sudan will surely teach you that the complaint cannot be lightly dealt with.

The Sudan Elephant carries as fine and heavy ivory as there is to be got in Africa. True that some of the finest tusks have been secured further south, but speaking generally, nothing below a sixty-pounder should be considered warrantable, and I would even make it seventy. A careful study of tusks in museums, private collections, etc., with attention to length exposed, plus thickness, should enable anyone not to fall below this standard.

Rather an unusual occurrence befell me in this country. One hot May day I saw what looked like a very fine solitary tusker grazing in a plain about a mile inland. Determined to shoot him I found myself confronted by a broad belt of intervening sudd. A search for means of landing resulted in the discovery of a well-used Hippo run. Running my steamer close alongside and accompanied by my orderly and a sailor, I was lowered into chest-deep water. There ensued an hour-long struggle through the sudd, but eventually we found ourselves on dry land. The tusker was still out in the open, so leaving the sailor to mark the Hippo run, my man and I made a long detour to get to windward, and then advanced on the tusker. The going was bad, as we found the best way of approach lay along the shallow course of a dried-up khor. When about two hundred yards distant from our quarry, I looked up to find he had disappeared! It seemed quite impossible that he should have vanished. The ground was open and bare of cover. Where on earth could he have gone? My orderly was equally at a loss. There remained the possibility of a concealed hollow, so we pushed on. Another hundred yards and my orderly spotted his bulging side. There he was lying down, seemingly fast asleep. We stopped and considered the situation. Could it be that he was wounded or dying? No. A prolonged scrutiny at various stages of our advance had disclosed nothing wrong. Fat, sleek and unconcerned he had been feeding, throwing grass and mud over his sides, gently flapping his enormous ears and behaving in all respects like a normal Elephant. Carefully and quickly we crept up to within twenty yards. Now there was no doubt about it, the animal was fast asleep. The gentle rise and fall of his side, an occasional throaty snore. Putting up my glasses I made a careful search of every visible inch of his body. There was no sign of a wound; in fact he seemed

in prime condition. How long we stood there deliberating in whispers I cannot say. I had never seen nor heard of an African Elephant being found asleep. If in need of a siesta why had he not sought some shady twenty-foot high papyrus grass which stood within a few hundred yards of him.

Moving into a position at right angles to his length I signed to my black orderly to blow his whistle. All I got was an incredulous stare. My meaning and intention made clear, a broad grin accompanied the dawn of intelligence on his face. Drawing his whistle from his jersey pocket, he blew a shrill blast. In an instant the tusker was upon his feet. There was no startled raising of his head, no definable movement, just one vast instantaneous heave, and there he stood, ears cocked forward and upraised trunk, feeling the wind. Slowly his ears went back, disclosing the vital spot. No error was possible at such a range, and he was dead ere he lay stretched on his erstwhile bed.

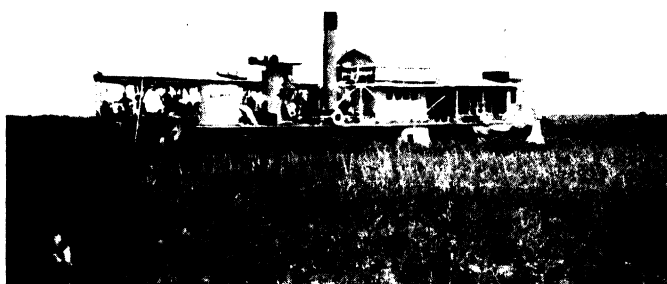
A prone Elephant is a rare sight and although a few others have been equally fortunate, the occurrence has seemed worth recording.

Much has been written on the subject of Elephant-shooting, much of it by hunters who shoot for a living, and sometimes their methods seem cruel and wasteful. To the novice I would say this: study the brain shot and except in self-defence use no other. A tusker is a magnificent creature and if he is shot, the brain shot alone means both a painless and instantaneous death.

A few years ago some correspondence was published on the subject of Elephant cemeteries—that the Elephant when becoming conscious of his approaching end was supposed to make for some secluded spot wherein to lay his bones. It is safe to assume, or rather I should say, it may be charitably assumed, that a traveller, ignorant of the ways and habits of wild beasts, or of the customs of the country, came across a collection of skulls and bones. Finding himself unable to account for such a phenomenon, he came to the conclusion that the Elephants had come there purposely to die—and rushed into print.

Now it is a matter of common knowledge to those acquainted with the Bahr el Ghazal, that one of the methods of encompassing the death of Elephants, practised by the natives, is to catch a herd in high, dry grass and to fire it simultaneously on all sides, burning the wretched animals to death.

Such a happening comes within my own experience and I will describe it, much as it was told me. I happened to notice that rather a large consignment of ivory brought in to headquarters to be weighed, marked and registered, was all scorched and blackened. An odd tusk would have passed unnoticed, but here a uniformly charred and blackened consignment seemed to warrant explanation. I was told that a certain swamp which dried up before the rains was a favourite resort of Elephants and was carefully watched. As soon as the luckless herd was located, word went round and in a short space of time the outermost edge of the cover was fired all round. The ensuing scene can be easily visualized. First the alarm and move off down wind. Faced by fire, where none was expected, the herd would panic, charging blindly east and west, north and south, only to be driven back from each side. Suffocated, scorched, and blinded the whole herd perishes. Years pass. Bleached by the fierce sun and



Plates 33—35

THE WHITE NILE

Top. SHILLUKS IN AMBATCH CANOE.

Centre. ANUAK VILLAGE ON SOBAT RIVER.

Bottom. NILE STEAMER BLOCKED IN SUDD—UPPER NILE.

dragged hither and thither by Hyenas, the bones lie scattered over a wide area. It is such a sight that may give rise to the theory of Elephant cemeteries.

On another occasion, a prowl through country, described on some old maps as Dar Banda, disclosed a collection of many scattered bones, obviously belonging to several Elephants. A search disclosed no more than four skulls, but from the number of bones scattered all over the area, it might easily have passed for an Elephant cemetery. Inquiries elicited the fact that four Elephants had been killed in a storm, that is, struck by lightning. In all probability, bunched together under a tree, all had suffered a common death.

The Sudd region forms a wonderful sanctuary for Elephants, and, provided that our engineers do not drain it off—I hear that schemes to save all this waste of precious water are afoot—it must eventually become one of the last remaining strongholds of game, now fortunately scattered all along the Nile.

At the time of which I write, my duties kept me travelling up and down the Nile and Bahr el Zeraf. Lions and Leopards, especially the former, are numerous along the Bahr el Zeraf. They haunt the river banks and, having killed and eaten, lie up in the reeds fringing the river banks. The thresh of the passing paddle-wheeled steamer would bolt them. At the time of which I write, this river was closed to tourists, and a wonderful head of game grazed unmolested right up to the banks. The Lion along the Nile carries no mane to speak of, and I have never seen more than four together. They are disinclined to show much fight, even when wounded—at least such is my experience. The Lion's most attractive asset is his mighty voice, and the nightly chorus to be heard in the forests south of Renk and along the Bahr el Zeraf is an experience not to be forgotten.

Early one morning found me on the bridge of my little steamer, glasses in hand, when some movement in the grass caught my attention. When almost abreast of the spot, a glance through the glasses disclosed two full-grown Lions eating their kill. Beyond a prolonged stare at the steamer they took not the slightest notice of us, in fact so gorged were they with meat that the steamer had been tied up and a stalk in progress before one stood up to be bowled over, the second one sharing a like fate as he galloped off. No sooner were we under way again than we saw a big, solitary old bull Elephant ford the river a good distance ahead, and continue his way towards the Sudd. A long and stern chase ensued, and eventually I found myself within a few yards of his tail. This animal was inconceivably thin, his sides covered with suppurating wounds; in fact, he was little more than a skeleton. It was obvious that he had not long to live and was making straight for the Sudd, where, at least with fodder and water to hand, he could hope to die unmolested.

A merciful bullet having put an end to his sufferings, I returned to a well-earned breakfast, while some of my followers proceeded to skin the Lions and others to cut out the tusks.

Information from the natives leads one to believe that Leopards must be numerous. Whenever Shilluks, Dinkas, and Nuers turn out in their war-paint for dances, bits of Leopard skin will invariably be found attached to the scanty outfit of the young braves. But this elusive beast

is seldom seen, partly by reason of his nocturnal habits, possibly more often owing to the skill with which he can conceal himself where no cover appears to exist.

One such *rencontre* may bear relating, for it gave rise to the only unprovoked charge the writer has experienced.

One broiling afternoon in May found us lazily threshing our way along the Zeraf, when a shout of "Leopard" from the man at the wheel brought me to my feet. To stop the steamer and make a quick turn into the thick fringe of reeds along the bank was a matter of routine. Seizing a heavy .450 Rigby, and followed by an orderly, I ran forward, jumped into shallow water, and scrambled up the bank. Not a sign of Leopard, but for a few low bushes and patches of coarse grass, there was not cover enough to hide a Guinea-fowl. Following signals from those on board we walked along the bank to a patch of low, knee-high grass. It was very thin and covered a patch of ground no larger than a tennis court. Through this we walked and proceeded to look all round. Another patch of grass lay a hundred yards ahead, so, as we were following the direction signalled, we walked up to it. Still no sign. Not far off a Reedbuck stood under a tree and a pair of Oribi appeared equally unconcerned. These animals had most certainly not seen the Leopard. My orderly was equally at a loss, so we proceeded to walk back to the river. Just as we reached the first patch of grass my orderly stopped dead and almost hissed at me: "The Leopard, sir, Leopard. Look out. Shoot. Shoot. He is going to charge." "Where? Where?" said I. The man was pointing at the ground some ten to twelve yards ahead. I could see nothing, just a few tussocks of grass. My man told me afterwards that he had to warn me to shoot as he saw the Leopard's tail twitching.

All this takes some time to relate, but actually it all happened in the space of a few seconds. I had no more than pushed up the safety catch and raised my rifle to my shoulder, when, apparently out of the ground, came the brute straight at me. Tail in the air, a succession of grunts, all teeth and claws. I took a shot at his chest. A slight stumble. There was no time for a second barrel; I had just time to put up my rifle to guard my head. A lightning stroke with his paw that caught my rifle and drove the breech against my eye, cutting it badly, and I was sent flying one way and my rifle another. The Leopard stood there within a few feet of me, snarling horribly, and at this moment my excited orderly loosed off into the brown, and fortunately missed us both!

Then, to my great relief, the Leopard walked off, going very lame in front. I picked myself up. No harm had been done. Hat and rifle collected, we hurried after the brute, and soon came up with him again in the second patch of grass we had explored. Hearing us, he stopped and looked back over his shoulder, emitting a growling snarl. No more than twenty yards away I raised my rifle to shoot, only to find that I was shaking like a leaf and quite incapable of bringing my sights to bear on anything so small as a Leopard. There we stood, the Leopard giving an occasional look round accompanied by a snarl, while, from time to time, I raised my rifle, only to realize the utter impossibility of hitting the brute. Finally, the Leopard decided not to face the open ground to his front, and turned and circled back in the direction he had come from.



Plates 36—37

THE WHITE NILE

Top. THE LATE CAPT. F. C. SELOUS HOLDING A GREATER BUSTARD. A PHOTO TAKEN ON HIS TRIP AFTER GIANT ELAND IN THE SUDAN.

Bottom. A GOOD WHITE RHINO. SHOT BY THE DUKE OF SUTHERLAND. VERY RARE AND LOCAL, AND STRICTLY PRESERVED. COMPARE THE SQUARE JAW WITH ROUNDER ONE OF THE BLACK SPECIES.

The same thing went on for quite a hundred yards. Every time we got too close he stopped and snarled, and every time he limped along we dogged him. Finally, he reached an old, worn-down ant-hill, and, walking on to the summit, surveyed the horizon. Faced by a burning hot plain and not a scrap of cover, he once more turned towards us with a snarl and his tail began to twitch. "Shoot," said my orderly, "he is going to charge." Now it was neck or nothing. Before he could hope to escape he must shake off his pursuers.

Fortunately for me I found myself standing close to one of those low, evergreen bushes, common to the Sudan, all stalk and thorns, but no leaves. I stepped behind this and took aim. It was no good, I could not keep the sights on his spotted hide, but it was no use hesitating, so I fired. A clean miss. Round he came, a succession of coughing grunts, straight at me. Would he jump the bush or come round? My orderly, stout fellow, held his fire; he quite understood that nothing but dire necessity would justify him in shooting. I was quite cool now. Another miss or failure to shoot dead, meant at the very least a severe mauling. I was determined to wait and blow him off the very muzzle of my rifle. On nearing the bush he turned off slightly to come round it; I leant forward and fired, catching him fair behind the shoulder and he fell dead within a couple of yards of his objective.

Now there is nothing strange in the following up and shooting of a wounded Leopard. The inexplicable part of it lies in the absolutely unprovoked charge with which the proceedings opened.

Thinking it over afterwards, I came to the conclusion that this animal had very possibly lost his fear of man; he may have been cornered and attacked by a native, to find that his innate fear of the species was unwarranted, and that once he got to grips the resistance was nil, and that man was the softest and easiest of victims. Many a man-eater, I am sure, is started on his fell career by a similar experience.

I confess I was annoyed with my orderly for firing his first shot, but the man was perfectly justified in doing so. He could not possibly be expected to wait and see what the Leopard was going to do next after knocking me over. It is only fair that I restate a well-established fact. The Sudanese soldier has his faults, and one is his extreme excitability. He may do the wrong thing, but one thing he will not do—leave his master in the lurch. For sheer staunchness and fidelity they may have been equalled, but they have never been surpassed.

Of White-eared Kob it is unnecessary to speak; they are to be found everywhere. Much has been written on the subject of their coloration. Why should one buck be black and another red, both mature specimens? I can add nothing to explain the mystery.

Both of those famous hunter-naturalists, Abel Chapman and F. C. Selous were puzzled by this variation in colouring.

There is one more species of Kob to be found. Abel Chapman, in his delightful book, *Savage Sudan*, on page 172 mentions the Woodland Kob he found on the south bank of Lake No, "practically all tawny, paler than anything hitherto seen, and devoid of the conspicuously white facial markings." Being uncertain that this Antelope belonged to another species, he refrained from shooting.

SUDAN (Continued)

CHAPTER SIX

GIANT ELAND ON THE WHITE NILE

(*T. Derbianus gigas Sudani*: El Bhuggar)

By COLONEL J. L. F. TWEEDIE, D.S.O.

A THREE months' shooting trip up the White Nile can offer a very good mixed bag, including, with luck, Elephant, Buffalo, Lion, and two animals not found elsewhere: Nile or Saddle-back (Mrs. Gray's) Lechwe and White-eared Kob.

But the real treasure, which should be made the motive of the expedition, is the Giant Eland. There are only a dozen or so outstanding trophies from Africa which combine both grandeur and rarity, and of these the Giant Eland comes very high in the list. A trip which yielded one trophy only, and that a fair-sized Eland, would have been a far greater success than another trip which produced a dozen or more varieties without the Eland.

Quality, not quantity.

Moreover, the Giant Eland's habitat is a very narrow one. Outside the Sudan he exists in the Northern Congo, in the French Wadai south of Lake Chad, and in a few remote districts of West Africa. Of these few localities his Sudan habitat is the most accessible.

In the Sudan his best-known haunts are:

- (1) The Jur country, a few miles east of Wau.
- (2) The old Lado enclave.
- (3) The western portion of the Bahr el Ghazal.
- (4) The Gell river, between Wau and Rumbek, a continuation southwards of (1).

And, of these, it is proposed to deal with the country between Wau and Dem Zobeir.

The best months for this shoot are January to April.

Khartoum would be the base or fitting-out place, whence stores, camp equipment, and at least one good servant as cook and body servant, should be taken. In case the sportsman speaks no Arabic, a man should be found who, besides speaking some English, has a knowledge of the Southern Sudan and its varying dialects.

There are no recognized shikaris in the Sudan and the only plan is to pick up a local man at or near the selected hunting grounds.

The Nile mail steamers leave Khartoum for the south about once a week.

On arrival at Wau the local D.C. would help the sportsman to make

arrangements, which mainly consist in procuring porters and a headman who knows the district and can lead the caravan to Giant Eland country.

It is going to be hot and water is going to be scarce and bad. Few fresh provisions, such as eggs, milk, and chickens, are going to be obtainable, so that plans should be made accordingly.

March at dawn and evening. Carry a doubly-fly tent and plenty of canvas water-bags as well as a mosquito net and boots. Swallow five grains of quinine a day as a preventive. Do yourself well in the way of tinned luxuries, tea, and whisky. Don't overdo it.

These are a few of the commonest everyday rules.

The Bahr el Ghazal country is not attractive in itself. A flat country of black cotton soil, long coarse grass, and patches of thin shadeless bush. Now and again, quite suddenly and without warning, the flat, but far from level, ground surface is broken by a dry khor or ravine, a huge crack rent, for no rhyme or reason, across the sun-and-fire-dried prairie. A crack that here and there splits finger-wise into a dozen lesser fissures, each a patience-trying obstacle in a long march.

Dry swamps appear, lush with parched reeds, cradling perhaps a shallow pool of liquid mud, fouled by constant streams of visiting game. Monkeys are the least cleanly drinkers of all, and bees have a revolting habit of drowning themselves by hundreds, and thus leaving a heavy scum of dead bodies to foul perhaps the only water for miles.

Camps must be guided by recognized water holes at the discretion of the headman or guide, but, at the best of times, away from the rivers, the sportsman must not be squeamish. By boiling and a free use of alum, a harmless and thirst-quenching liquid is procurable. Tea and coffee hide a multitude of sins, even if they can't quite disguise the flavour.

Other game, such as Hartebeest, Uganda Kob, Bushbuck, Reedbuck, Water Buck, and Oribi may be seen, though generally not in large quantities. But, in any case, it were better to make straight for the Eland country without delay and, on arrival at likely ground, not to shoot at anything else. Eland are scarey beasts, and as soon as your meat-starved natives realize that their only chance of a square meal is to find you a good Eland, they will really and truly set to work. Your carriers and camp followers are the human element you have to contend with. Here are some of their pet failings:

(1) To prevent you pushing or leading them too far away from their own village by (a) assuring you that there is only one herd of Eland in the whole district and that it is somewhere about here, (b) by swearing that there is no more water ahead, (c) by leading you in a circle round their own particular haunts.

(2) They are difficult to start on the march at any time.

(3) Impetuous to urge you to shoot at anything and everything, and once their bellies are full to show every disinclination to continue the real hunt.

But, granted that all difficulties have been overcome and you have reached your hunting ground, you must rely now on your local man, guide, hunter, or whatever you choose to call him. But don't rely too much. If he is worth his salt and your luck is right, he will show you Eland, but these are not common or garden game and need care and discrimination.

During the dry season the only time when hunting is possible is when the grass and jungle is burnt up and low; the scrub forest that Eland inhabit is very open, and to approach nearer than 150 yards is very difficult.

The favourite food of Eland is obtained from a bush which grows to a height of six to eight feet and has a stiff, dark green leaf and a whitish flower, not unlike the passion flower. Eland do not graze, but browse on leaves, and I have never seen a herd at rest. When feeding the entire herd, well spread out, moves at a fairly fast walk, snatching a mouthful here and there. In this way they will cover an immense distance between sunset—when they move—to shortly after sunrise, when they lie up for the day.

They are said to be indifferent to water and not in the habit of drinking daily, but there is no proof of this assertion.

My experience has been that, short of the luck of coming across fresh spoor, your local tracker will make straight for water in the hope of picking up the fresh track of a herd. They invariably drink in the morning and then make direct for their lying-up place, so that unless you arrive at the pool or water hole within an hour of the herd's departure, you are very unlikely to come up with that particular herd.

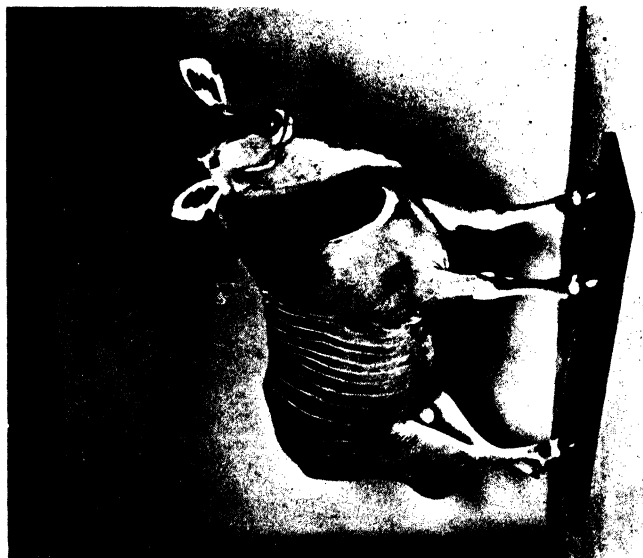
No water seems to be too foul for the Eland to quench his thirst.

Once you have sighted your herd the real fun commences, and now is the time that you must take charge yourself. The herd is probably scattered over a rough and fairly open clearing dotted with scrubby trees and an occasional ant-hill. They may be browsing off trees and bushes of about their own height, with their long spiral horns laid back the length of their bodies. You are struck at once by their huge bulk and the way they seem to blend in with their surroundings. Even now, when they are a bare three hundred yards away and as big as bullocks, you could not swear to how many there are in the herd. And the longer you stare, more and more unsuspected shadowy shapes take form and again lose themselves in unimaginable cover. In sudden trepidation you wonder if the herd is all around you and if some unseen beast will not, any moment, give the alarm. And even as you watch, motionless, the whole herd has unexpectedly vanished, borne by their nervous, jerky browsing. Be careful now not to do anything rash or to rise and move too quickly in pursuit.

Despite their bulk and seeming clumsiness you have twenty pairs of eyes against you and they are in their own natural surroundings. Although their only enemies may be Lions or humans, they are alert and suspicious, and at alarm will break into a slow, steady trot that will carry them for miles. An almost hopeless quarry to follow, once set on the move.

So far you have not seen nor picked out for certain one unmistakably fine bull. Your first impression was that they were all monsters and mostly carried fine heads. Don't forget that an Eland cow often carries a longer pair of horns than the best bull, and that, seen for the first time, the horns of even an immature bull of Giant Eland are a marvel.

You are only allowed one; see to it that there is no mistake. Better by far to let this particular herd go unscathed than be jostled into a hasty shot. You have come all this way for one head; every day's hunting



Plates 38—39

WHITE NILE

Left. GIANT OR DERBY ELAND. ONE OF THE RAREST AND FINEST TROPHIES OF AFRICA, AND THE GREATEST OF THE ANTELOPES (MODELLED IN THE ROWLAND WARD STUDIOS).
Right. AN ARMADILLO. VERY RARELY SEEN ON THE MOVE BY DAY.

should be a joy; take care that the prize may be something to be proud of. I impress this point strongly, as there are few other varieties of game which can count so many regrettable errors in their pursuit, both of cows and of immature bulls.

The herd has moved out of sight and it were better to give it a few minutes to make sure there is no lurking suspicious rearguard before you once more take up the trail. Give place to your tracker once more, who, by this time, may have begun to realize vaguely that there was something in all your previous talk about only wanting a big head. He does not care, but he wants the meat and, knowing the tricky quarry, he may decide to find you the best head and to try and persuade you to shoot before it is too late. Don't rely on him for this, don't even accept his beck and nods at a certain beast without very careful examination, but accept his bushcraft to reach the best spying-place. He has hunted himself, you can be certain, and his weapon has probably been a spear.

If you are lucky this time you may reach an ant-heap or such vantage point within some one hundred and fifty yards of a semicircle of browsing beasts. You may have grasped your problem by now and your heart have ceased its pounding throbs.

The only thing to do now is to use your glasses and to work all over the herd. Once you have spotted a really fine bull there is no fear of making a mistake; the pronounced dewlap and darker colouring of the bull will give him away and you will now notice his horns, compared with which all the others appear insignificant and even stumpy.

Once you have chosen your head, take your time. Your only danger now is that a lesser beast should lurch up unseen in the shade and act as a screen to your target. Absurd as it sounds, such accidents have occurred. So, once selected, try not to take your eyes off your beast.

One other thing. Aim to kill. Make certain of your shot, for a wounded Eland takes a mighty lot of following. He is such a huge beast and so much of him looks the vital spot. Better by far let them fade away again and make your third stalk, than shoot before that shoulder is clearly defined and your aim is confident.

After all, to fail to shoot is not failure. There is always to-morrow, and you are expressly there to hunt Eland. Why cut the pleasure short when next hunt may bring you a record?

Eland are never seen in very large herds and as a rule they run to one big bull and some ten to twenty cows and young animals.

When F. C. Selous visited the Bahr el Ghazal in 1911 in pursuit of Eland he spent most of his time with me, having been directed to Rumbek district, the extreme eastern limits of Eland country. Had he been sent a couple of days' march further west to the Gell river country, there is no doubt that such an experienced old hunter would have succeeded in his quest.

Mention of Selous tempts me to relate the following anecdote of this famous sportsman.

After his return from his vain search for Giant Eland, he told me that he was anxious to shoot some good specimens of White-eared Kob, both black and red varieties, for the museum.

We went to a part of the country where he could see them in hundreds and take his pick. We were out together one evening, when he fired at

and broke the leg of a fine Kob, which went off with its leg dangling. Off went Selous in pursuit at a jog trot. I followed in a leisurely manner and Selous was soon out of sight. Half an hour later I heard a second shot, and, heading for the spot, found Selous sitting by the side of an ant-heap. He had skinned the Kob and had the pelt and horns tied up in a neat bundle. He must have covered two miles in blistering heat and over the most horrible black cotton soil. Considering that he was then just sixty years of age, it was a stout effort and a fine example of following a wounded beast up at all hazards, honour bound.

The fact that the great Selous considered that a hunt for Giant Eland was worth while and only failed through faulty information, may add some value to a fine quarry. They are not so difficult now that their haunts are better known. On the other hand, now that the advance of civilization has made their habitat so much more easily accessible, are they one of the fine beasts that are doomed? It is not perhaps the rifle of the regulated sportsman that they need fear, so much as the local native. Game sanctuaries and regulations are good, but who is to control the wild native himself? *Pax Britannica* has freed him from inter-tribal wars and slave raids, only to free him to play havoc among the game.

SUDAN (Continued)

25

CHAPTER SEVEN

ADDAX HUNTING IN DONGOLA

By MAJOR H. C. MAYDON

WHEN I was in the Sudan to finish my last two years' tour of Sudan service and to retire on pension, I was stationed at El Obeid. Our western frontier extended to the western boundary of Darfur.

No news of Addax came in from Darfur, but I met several officials from Dongola and I was by now convinced that the only Addax country within the Sudan borders was the desert north of Darfur and west of Dongola, and that two months' leave at least was necessary. Then, as the end of my period of service drew near, information came in fast.

I was lent a semi-official pamphlet for the guidance of shooting parties after Addax from Dongola, but more tempting still was the idea of finding a new route to Addax country from the south, using my own station of El Obeid as base.

The pros and cons were as follows:

From Dongola the route was a recognized one to Addax country if not to the certain quarry itself. But the information was many years old. Several of the guides had died or disappeared. The reliability of the rare wells was doubtful and the trip was an expensive one, even to us who lived in the country.

From El Obeid. First was the great advantage that I could use my own station as base, packing my kit and stores in my own house and taking a larger staff of tried servants. Furthermore all the civil officers in that part were personal friends and only too keen to give me all the help in their power.

Secondly, there was the overpowering attraction of blazing a new trail and seeing almost brand new country.

As an offset was the possibility of never reaching Addax country at all. Everything depended on the last water we should pass and how far south the Addax might have wandered.

But the factors which finally decided me were these:

The Acting-Governor at El Obeid was an old friend, Mr. Sarsfield Hall, who had lately trekked as far as Jebel Meidob and beyond, northwards into the waterless Dongola desert. At Meidob were good wells and villages of Nubas, and more important still he had located natural open pans of water in the Teiga hills some hundred miles north of Meidob. He had seen no Addax, but it seemed they might be found anywhere beyond that point.

There was a meeting of all the big Kordofan sheiks at El Obeid at this time, and from among them I was introduced to Nimr Hassan. He told me of his patrol up north of Jebel Meidob in 1916, assured me that we should find Addax, and offered to find me scouts and camels and himself to act as guide. That convinced me.

It was decided to meet at Soderi, our farthest north-west police post and civil headquarters, one hundred miles from El Obeid, at the end of January.

At last!

So much for the strategic part of the expedition, now comes the by-no-means-lesser part, the tactical preparations.

Our chief difficulty was to be the water question. Every soul in the party was to be mounted on a camel and our transport was to be trotting camels. Now in the Sudan winter a camel should be watered every ten days, although he can go twenty days in light work, and can exist, as we were to prove, for months without water, if the grazing be good and he is not working. Put it at sixteen days and it is evident that one is limited to an area of from eight to ten days' march from the last water, or, say, two hundred and fifty miles at the utmost, counting twenty-five to thirty miles per day. The idea being that we should be free to scout and wander freely, and on the eighth day the camels should dump us and the baggage in some standing camp and then, off-loaded, should trot back to the nearest water, drink, refill water tanks, and rejoin us quickly. That meant that we must carry sufficient water in tanks to last the men for twenty days and, as a supplement, every one should carry a full waterskin on his *makloofa* (camel saddle).

Our party was to be made up as follows: self and three servants, four; Nimr Hassan and one retainer, two; baggage-camel men, four; armed Arab scouts, six; armed police, two.

The scouts were used both as Addax scouts in pairs and as an armed guard in case of meeting Geraan. Their rifles were kindly lent through the assistance of the Governor and the police.

Allowing for waste and accidents, I counted twenty men a day at one gallon each (full ration), *i.e.* twenty gallons.

I decided to take sixteen camel *fantasses* (iron tanks) of twenty gallons each, which are specially made as one pair to a camel load. That gave us sixteen days clear, or more if one reduced the ration. Hence we arrived at the number of camels required: eighteen men, eighteen camels; *fantasses*, eight camels.

The baggage-camel men and my servants walked part of the day or rode on top of lightly loaded camels.

A good camel is, to my mind, by far the best animal to ride, and for transport, on safari. He is as easy and untiring as an arm-chair. He breaks into an even, easy trot the moment you leave camp, and keeps it up for hours until you reach the next halt. Beside your vile self he carries in *khurags* (saddle bags) and on the saddle, and strung about it, enough blankets, food, water bags, rifles, and ammunition, etc., to keep you going for several days. The nightmare of losing your transport for a night or two loses its terrors. The animal water question is no longer a twice-daily nuisance. You camp when and where you will. This one learns to appreciate in a desert country where the only clean shady tree is, maybe,

a day's march from the nearest water. One can make a long or short march of it as the spirit moves one and, when tempting game appears, one can afford to dawdle.

Moreover, with the Arab-owned camel the fodder question is made easy. He is bred and trained to live on the country and on the food that Nature provides. He is a queer feeder, the camel. You can train him to eat durra and such man-grown corn, and he thrives on it and no doubt enjoys it in time; but I'm not sure you are not pampering him and spoiling his palate. A real, hardy, self-respecting camel prefers thorns—the real, tough, spiky sort, white tipped and with a small bunch of parsley-looking leaves at the base which grow on the desert acacia trees. It is a real joy to watch him clear up a nice spiky bush that you would be loath to tackle in armour. You have plenty of opportunity on safari since the camels always seem to prefer the thorns of the bush nearest your tent. I fancy that trampling down the tent ropes adds zest to the meal. They make such queer gurgling noises too; but when they begin blowing bubbles I generally leave camp.

I love watching camels' expressions. Each face is different and full of character and you can see his mood changing. You can trace the resemblance in expression to many of your friends and enemies. They are very human.

Do you number a camel or two among your acquaintances? If so, you must have noted his moods, and those thick leathery lips. What else could suit him but spiky food?

But bad camels are a holy terror; don't let's talk of them. All mine were good. Nimr Hassan, a sheikh of the Kabbabish tribe—camel experts—saw to that. Nor were his precautions quite disinterested. The pace of a desert fleet is the pace of the slowest camel, and our lives might depend on it.

Thus were the transport questions, personnel and water, disposed of. There remained the question of my own stores for two months, and the Arabs' food. Neither of these presented any difficulty. In the army of the Sudan one spends half one's life on safari, and, in a general way, each individual messes by himself and is ready to move off on "patrol" for a month or longer at half an hour's notice; his "magazin" should be full of stores, his chop boxes ready, and his cook a man of action.

One could fill an encyclopædia with Sudanese-cook anecdotes. They, like all the natives of the Sudan, are representative of every breed, from the highly paid, intelligent, and generally most drunken Berberine, passing the stages of Dongalawi and Riverine Arab, the black and very stupid Sudani, to the cannibal tribe of Yum-yum, the long-shanked Nuer, and even the bright little cosmopolitan of West Africa. As an average there emerges a complete scoundrel. A thorough drunkard, an inveterate gambler, a tizzie snatcher, who mulcts his master of one hundred per cent. overcharge on every purchase, an absentee who trains his *marmolan* (cook's boy) to do the work while he drinks and gambles in the bazaar, and, often enough, pawns his master's cook-pots to pay his debts. A brawler with the morals of the poultry yard. But on safari he is generally a jewel without price. The word goes forth: "We march in two hours. We may be away a week, a month, any time, make the *tartib* (arrangement)." It is done. Osman cadges 1£E for exes and vanishes in a cloud

of dust bazaarwards. Within the two hours he reappears, not sober, but, with luck he may walk or be supported to his camel and tied on for the journey. His marmotan and various outsiders carry up several *goofas* (baskets) containing fresh eggs and meat, a bottle of milk, a head of sugar, loaves of bread, fresh vegetables, and a couple of live chickens. With that and a filthy cook's box from the kitchen he will keep you going for a week. After that it is up to your chop boxes, the country, and the will of Allah to provide.

For himself and the other native servants, they have solved the world's problem. In a moment they whip up a blanket, a goatskin of Durra flour, an old tin as cooking and drinking pot, and they are ready.

But on this particular safari some forethought from the leader was necessary. Up to Jebel Meidob at one-hundred-mile intervals the Arabs might buy flour, etc., and live on the country, but beyond was like mid ocean in an open boat. I heard that at Soderi—the real starting place—such commodities might be had in plenty, and from there I carried several 40-lb. sacks of flour and some native butter, pet luxury of the Arab. All Nimr Hassan's men carried their own private supply of dried bread on their camels.

Camp furniture is the same all the world over, and from constant use becomes as familiar as one's shaving tackle. But in the Sudan it is the custom to make two short marches a day instead of one long one. From sun-up for three or four hours, until about 10 a.m., and then, after a long rest, on again from 3 p.m. till dark. By this means man and beast are not kept toiling through the heat of the day, and the camels have two long opportunities of grazing by daylight. By night they are brought into camp and barracked and the Arabs appoint their own stable guard.

As a general rule tents are not put up at night, when in those magnificent, starlit, dewless nights, the best part of the twenty-four hours is to dine and sleep in the open and to feel free with the whole canopy of heaven to yourself. But on a hot, glaring day or in standing camp, to sort your chattels, a tent is welcome. A camp bed, table, chair, and bath; a box of clothes, books, cameras, and oddments, a shamadan box (candlesticks *à la* Sudan), the sacred guns, the khurags from the saddle, and one feels complete.

All this impedimenta and my servants were packed on local El Obeid camels to carry them the first hundred miles to Soderi, where we were to meet Nimr Hassan and the camels and personnel of the real caravan. I had been lucky enough to borrow a Ford car to carry me the first dull step of the journey. At the last moment I wavered about taking my half-bred Aberdeen pup, "Pippin," another throat to water. Then sentiment won and the inimitable jester was added to the party.

It is hot and dull and dusty, that first hundred miles via Mazrub wells. A land of fleas and camel ticks, where rare villages subsist, patches of durra are grown, and life is one long struggle with the water problem.

Here and there a cluster of patient inhabitants sit round to watch and take their turn to haul goatskins of water from some deep well dug in the sun-cracked wadi beds. A few hollowed tree trunks roughly scooped to the shape of a trough are slowly filled to water the never-ceasing stream of goats and sheep. On the other side an endless chain of women fill their *cantouches* (calabashes), exchange a merry quip, and patiently toil back to their village, perhaps some miles away.

Everywhere and perpetually before our eyes is the vision of the sacredness of water, the preserver of life. None of us can appreciate it until we have seen it, have lived in the atmosphere. Here is an instance.

In the Fasher show, a little black slave boy, whose master was killed in action, was captured and adopted by one of our British officers as servant. He was some ten years old and could never have seen anything of life beyond the Arab customs. He had never been out of Darfur, and thus knew nothing of civilization. He was all through the rest of the expedition and, as body-servant to a B.O., saw most of the game. He saw machine guns in action, aeroplanes, motor cars, electric torches and typewriters and all the rest. He saw his own wounded kindred cared for and cured. He was taken back to El Obeid by motor car and thence to Khartoum by rail and steamer. He lived in Khartoum and saw or heard most of the marvels of civilization. Months later he was asked what had impressed him most. He was not nonplussed by the question. He had the air of being unmoved, as if he waved it all aside as the futile playthings of the mad white men. But yes, one thing had struck him. The water taps on the basins in the lavatories in the train, ah, yes, that was wonderful. You were travelling and you pressed a knob and water arrived miraculously from out of the void.

Close to Soderi we began to see game in numbers; we had passed a belt that held Addra Gazelle, and now Dorcas and Ruffrongs were very common, and in the detached jebels Wild Sheep (Barbary) were rumoured to exist.

I found a friend, Newbold, Assistant Deputy Commissioner, at Soderi, and all my preparations well in hand. A police corporal and man, Arabs, were to be lent me. Newbold was mad keen on his district and very envious of my free-lance jaunt. He has beaten me hollow since those days and carried the trail as far as Bir Natrun. His enthusiasm went deeper than mine, for he embraced the ancient history of the country and what has happened there before the ken of man. He spoke of the ancient rock carvings in the district, of graves, of shapes of skull and bones, of old relics and myths and legends. I paid little attention, being Addax mad, but I was to see enough later to set me wondering.

A day was spent at Soderi watering camels and giving an advance of 1£E (100 piastres) to all of the men for their families and for food *en route*.

At long last the fateful day arrived that I had dreamt of for so many years. We were actually equipped and ready to move off into the blue. Within a month, or at the utmost two, I should know my fate. Addax or failure. At 2 p.m. that day the last knot in the final load was tied, and, amid the customary "ulooing" chant of the Arab women to their menkind starting on safari, we pushed off.

Our direction was north-west, which so continued most of our journey. There were no roads or tracks. We were heading first for Hamra, the winter seat of the Nazr (king) Ali Thom of the Kabbabish tribe, half-way to Jebel Meidob, which is ninety miles from Soderi. This part of the route was simple enough to Nimr Hassan's retainers, hardy Kabbabish and natives of the country. Nevertheless the art of leading in a bee-line across a trackless desert, generally without landmarks, will ever remain a marvel.

The *hamla* (transport) whose pace averaged some three and a half miles per hour against the five miles of our riding camels used to set off an hour ahead of us and we would overtake them on the last lap of the march and then take the lead to choose our halting place. On my own camel and that of my servant was my roll of bedding, camp bed, deck chair and a nosebag containing kettle, tea, milk, and biscuits, so that I could always sleep longer and have a light meal without delaying the *hamla*.

But this necessitated two guides from among the scouts, one for us and one for the *hamla*, who always rode fifty yards ahead of his party. As far as Meidob, although wayfarers were rarely seen and villages or herds never, save at Hamra, camel tracks were common and confusing. Beyond Meidob tracks were seen perhaps three times in five hundred miles and were then the cause of excitement, as I shall describe in due course. Yet the guides never faltered, but led steadily on due north-west. Generally I rode ahead with the guide to spot game with Nimr Hassan at my elbow. He, like most Arabs, had achieved the precious gift of silence. There is a time for everything, and round the camp fire at night tongues wag and the flood is unloosed, till one wonders if an Arab ever sleeps at all. But on the march the world is good, and thought is good, and he is a fool who babbles with his fellow apes and thus misses all that Nature has to tell him.

I carried a compass and constantly checked the direction. Always it led north-west. Hill landmarks and big waterless wadis, named on the map as far as Meidob, checked our position.

We left Soderi on 27th January and reached Hamra on the 29th, a distance of seventy miles in five marches.

The climate was perfect. A strong, cold north wind blew all day and dropped in the evening to glorious, cold, starlit nights. From 6 to 8 a.m. my fingers were numbed with cold, and I wore a sweater and Norfolk jacket. All day long one preferred to sit in the sun to the shade, and at night in the open, a flea bag and three blankets were necessary and a camp fire was a luxury if fuel were obtainable. Yet this is a country that, from the beginning of April to the end of October, when the wind changes to the south, becomes unbearably hot, and is like a furnace in the open from 9 a.m. till 5 p.m. The temperature often reaches one hundred and ten degrees by day in summer, although the nights are generally fairly cool.

This desert country is a land of hard realities, in which all trivial things are blotted out by the stark realities of life. It compares only with mid ocean and the high mountain plateaux of the Himalayas and the like. Mankind, the lesser animals and bird life, and the gentle toning influence of green trees and grass and shrubs are non-existent. Here is nothing soft nor gentle, nor ever will be, nor ever has been. Nature, the heavens, fate has brooded here undisturbed a million years, and will ever do so. The only changes are her own fierce passions. The tearing sandstorm, the rare flooding torrent of rain, the biting cold of winter, and the fierce heat of summer. And yet there is a wild beauty about it all. The lights and shadows, the colours, the clouds, the inimitable sunrises and sunsets, and those perfect nights. I defy anyone, however unsentimental, to dwell long in the desert and to remain unmoved.

Whatever our Kismet may be, it is very near one in the desert and one feels alone.

As we neared Jebel Meidob and thence marched northwards one hundred miles to Wadi Hawa, a change came over the conformation of the country. To-day you might be passing through rolling country of switchback dunes, with natural fields of Heskit grass, waist high. (This was not yet ripe and dry. When it reaches that stage, each stem carries a bunch of heads, and each head disintegrates into a million devilish needle spines, which blow everywhere and penetrate everything. They are almost invisible and very irritating and hard to pull out when they penetrate the skin.) Now and then you pass a belt of stunted scrub, or a thicket of acacia trees. The next day might be an open plain of flat country dotted with scanty bush. The going for the most part was hard red sandy soil, with stretches of black cotton soil in the broader valleys. In the deeper sheltered ravines were dense shady belts of green trees of acacia, tamarisk, or wild fig. In such sheltered nooks we pitched our camps.

Since there were no villages and no water between our big objectives, firewood, camel grazing, and shelter were our only considerations. Each day queer-shaped jebels and small isolated plateaux loomed in the distance, but generally so small and insignificant, that, contrary to custom, I overestimated the distances, and we usually raised them and passed them in half a day's march.

The Wadi el Melek is a familiar landmark on the map, and turned out to be a broad sandy wadi, with trees in its bed and many wells. People and herds of goats and camels were thick here, and the Ferik, or temporary residence of the Nazr Ali Thom, was only four hours distant, near a branch wadi with shallow wells.

Ali Thom was most lavish in his gifts of sheep, milk, and durra flour, and next day accompanied us for the first hour of the journey.

It commences with a large open plain. Then little stony ridges or outcrops appear, resembling big hills dwarfed by distance. These are replaced by small queer-shaped table-topped kopjes of red sandstone and ridges of black shale. Then, as we topped a gentle rise, we saw Jebel Meidob in the far distance, huge and rugged and hazy, like some mountainous island sighted at sea.

Between us and Meidob (which is a rugged block of hills some six hundred feet high and sixty miles in circumference) stretched a broad plateau split by two huge shallow valleys, whose banks were lined by sandstone cliffs, and bluffs and knolls of fantastic shapes. Down the centre of each valley a thin line of green trees marked the course of the torrent during the rains, now bone dry. But from now on as far as the Wadi Hawa we occasionally found an ideal shady nook for camp under big green trees called "Saida" by the Arabs.

Game was never plentiful. Herds of Ril (Addra Gazelle) and Dorcas and, very rarely, Ruffrions and an occasional Ostrich were seen. But bird game, such as Guinea-fowl, Bustard, Francolin, and Sand Grouse had practically disappeared.

We reached El Ain well, at Jebel Meidob, on the 3rd February and were again in the haunts of man. But this time they were of the Black Nuba people. They were not attractive, they were suspicious of all strangers,

and seemed to think that every man's hand was against them. Like all Nubas they are hill dwellers, not nomadic, and grow only enough corn for their immediate needs. They are isolated in their particular *jebel* amid a sea of enemies. They own herds of cattle, sheep, and goats and have been the not-too-easy prey of nomadic Arabs since time immemorial.

We pitched camp in a wooded *khôr* about a mile or two from the foot of the hills. There were some very poor wells scratched in the bed of the *khôr*, quite insufficient to water our camels and fill our fantasses in reasonable time. A shy goatherd was dispatched to bring the Nuwabi Sheikh Mansur. He proved a shifty-looking black of poor manners and grudging hospitality, and little love was lost between him and the haughty Arab, Nimr Hassan.

But the goodwill of Mansur was essential, as this was the last village we should pass and the only place where we could rely on some supplies and water. A quiet talk and the interchange of a few piastres for the price of supplies and all was amicably arranged, even as to a guide to set us on our way. But Mansur was mum as to the habitat of game. He allotted us a well which we must deepen and clear out ourselves.

The well-digging and watering meant the enforced waste of another day, but on 5th February we pushed off into the unknown. We were off the surveyed part of the map now, on the South Dongola border. After leaving Meidob a bare and uninhabited desert stretched north of us one thousand miles to the Senussi country, broken only by the wells at Bir Natrun, some three hundred miles to the north.

By report the plateau-topped ridge of Teiga hills ran north and south and began several marches north of Meidob. Sarsfield Hall had told me of two *geltas* or natural pans of water at the north end of Teiga, which native rumour confirmed, but it had to be proved that they held water this year. Once proved successfully, we could use Teiga as our base and explore up to a distance of ten days beyond. As a safeguard we would tap the Wadi Magrur for water *en route*, twenty miles north of Meidob.

It is most of a day's march to clear the northern spurs of Meidob with the conspicuous *Jebel Tagaru* thirty miles away to the north. It is broken, bush-clad country at first, merging into a treeless, desolate expanse of switchback dunes.

Early next day we reached the Wadi Magrur, a broad sandy ravine heavily lined with big trees of acacia and tamarisk. There were scores of old water holes dug in the sandy bed, but all were dry. My men spent the day vainly digging new holes to be rewarded with half a dozen bucketfuls of brackish water. No, we must pin our faith on Teiga.

Two Meidobis, mounted on very tired camels, arrived during the day; they were the advanced guard of a caravan from Bir Natrun, bringing salt. They were very thirsty and reported that their party were in a bad way for want of water. They had been ten days out of Bir Natrun and had run out of water. They reported that Bir Natrun was full of friendly people and had no news of Geraan raiders. We gave them our new well, from which they filled their water skins and returned to lead up their caravan.

Three marches beyond Wadi Magrur, making north-west across a hard, sandy plain, brought us to Wadi Nawasha. Beyond, the country breaks up into barren foothills, the spurs of *Jebel Teiga*. Gingerly our camels



Plates 40—42

DONGOLA

Top. A BARBARY SHEEP, SHOT IN N. DARFUR, SUDAN. THEY INHABIT ISOLATED STONY HILLS, AND ARE VERY WARY AND RARE.

Centre. ADDAX BULL. SHOT IN DONGOLA DISTRICT, 200 MILES FROM THE NEAREST WATER. NOTE THE ABSOLUTELY BARREN DESERT IN WHICH THEY LIVE.

Bottom. ADDAX BULL IN CAPTIVITY. HIS COAT HAS GROWN MUCH HEAVIER AND DARKER THAN IN THE WILD STATE.

picked their way amid boulders and loose, sharp stones, across fissures and abrupt ravines. That bit is not good camel-riding country, and time and again my heart was in my mouth as my camel hesitated in some rocky descent, balanced for some moments on three legs, his fourth leg poised and groping in the air for the next foothold below. They are marvellously sure-footed, and must be allowed their own gait and direction. An agonized tug at the single rope, which, from the nose ring, is carried back and noosed round the neck, only brought a more terrifying result. With a snarling gurgle the camel would swing his head and neck round like a snake until his evil mouth snuggled your knee, while in front of your saddle all form of support vanished; you remained poised over space. You learnt to leave your camel alone.

From the top of our ascent, probably only four hundred feet, we had a good view of the surrounding country. We were standing apparently on the highest point of a long narrow plateau, which seemed to run for many miles north and south. Along most of its length abrupt hundred-foot cliffs separated it from the sandy plains below. Here and there in the distance other low detached plateaux, each surrounded by its abrupt cliffs, stood out like islands. Almost at our feet a thickly wooded but sandy gorge had bitten deep into our plateau, and ever widening and deepening, twisted down to the plain. Side ravines, green with shady, flat-topped thorn trees, fed the gorge and broke the starkness of its rocky cliffs. Here lay the prettiest spot I have seen in the Sudan, with a hundred ideal camping grounds on fine white sand under big shady trees. But to my amazement, not a single track of man or camel was found. This made one realize the sense of isolation more than ever before, for here was good grazing both for camels and goats and an ideal camp for nomadic Arabs, if only there had been permanent water. Tracks of Wild Sheep were common, and even those of Leopard and desert Lion, which may have watered from the rocky pans of Teiga and Umlehhei, each a day's march distant. Herds of Addra and Dorcas Gazelle, and an occasional Ostrich wandered amid the ravines.

Nimr Hassan called the gorge Wadi el Haraz, and scouts were sent ahead to Teiga and Umlehhei pans to establish water.

Next day we followed the gorge down to the plain and, skirting the cliffs along the northern edge of Teiga plateau, made a long march of it, and, by dark, crossed an easy pass at the junction of Teiga and another detached plateau. Good news awaited us as our scouts reported plenty of good water in both pans. But to me even better still was the finding of the bleached bones and horns of several Addax *en route*. They may have been ages old, but we had reached the true land of Addax at last, and, by finding water at Teiga, we had established a forward base which enabled us to scout two hundred miles beyond.

These "geltas" or water pans at Teiga are the essential key to any possible success after Addax by this route, and they must depend on whether there have been good rains that year or not. The reason that they are not more used by travelling Arabs is, I fancy, because they lie out of the direct line to Bir Natrun from Jebel Meidob, while the old Arbaeen (forty marches) route from Fasher follows the bed of the Wadi Hawa. They are too unreliable to attract grazing Arabs' camps.

We spent a day watering camels and filling fantasses at Teiga, which

I employed vainly hunting for Sheep. There I had my last good bath until the day of our return, whenever that might be. That is one of the things one learns to appreciate in the desert, as well as how to make a cupful of water sufficient for the day's ablution. For it's not all "beer and skittles" on a long hunt. There are black days when hope deferred and the fear of failure scarify the soul. But those are the days which are engraving the memory of a long hunt which is to succeed. They make it worth doing.

I have made no mention of "Pippin," surnamed the Jester, and claiming the best Aberdeen blood. This in no way means that he was a character of small importance. Quite the contrary, he had deserved his sobriquet. He was the life and soul of the party. He added that spice of humour at the right moment so necessary when times are hard and tempers are strained. For never yet has a small party isolated itself in the wilds without moments of tension, and always then the Jester was at his best. He was a pup of character and great heart. He won the approbation of my Arabs the very first day at Soderi by charging, bald headed, a group of pariah dogs twice his size, who had been too inquisitive. He routed them, too, by sheer cheek.

Elated by this easy victory, he adopted these tactics as an invariable rule. He charged everything and everybody with or without provocation. With pi-dogs and strange natives his pluck succeeded, especially when backed up by a campful of hearty admirers. But he met his first disaster from the butting horns of a cantankerous goat. Picking himself up, Pippin retired gracefully to the shade of a thorn bush and there lay panting and hanging his delightful red tongue. His little beady eyes glimpsed out from a shock of rough hair with a mischievous twinkle. Anon the goat resumed his disturbed grazing. Peace reigned in the camp. The world drowsed. Suddenly pandemonium broke forth. The Arabs shrieked and howled—the goat bleated. Pippin had stalked the goat, and, with a sudden spring, had fixed his baby teeth firmly in his hock. The goat shook him off and bolted. Pippin, his honour untarnished, swaggered back to us, his tail in the air, his head on one side, one ear cocked, and a broad grin on his face.

"Oh brave! oh cunning one! Well done, father of all the devils!" shouted the Arabs. From that moment he could do no wrong in their eyes, and many the wrongs he did—he, an unclean animal—and yet held his popularity.

Now Pippin was a great meat eater and strove mightily to do his bit and a trifle over, but in this land of open hospitality, of cheap meat and abundance of game, he met his match. For, besides his ration, we all fed him. He dined with me first, then the servants, and, last of all, the Arabs. And when that was done he started in on his own account. When there was abundance of meat, which was most days, the Arabs used to cut the meat into long strips and hang it up to dry in the sun or by the fire to make biltong. Pippin, of course, thought this was for his edification. Since his little tummy was full to bursting point, he used to pull down the meat strip by strip and go off and bury them. As we moved camp twice a day as a rule, Pippin always forgot where he had buried them. This was wasted labour, but was an unceasing joy to the Arabs, especially when it was the other man's biltong.

Since Pippin could not footslog all those long marches and was a perfect terror to carry on a camel, we had a special cage made for him to carry on top of a load. It was made very comfortable and had its own little awning to shade him from the sun, but Pippin hated it. When the camels were loaded up for each march Pippin used to disappear. He tried every sort of hiding place and more than once he was given up as lost for good, and the hamla moved off without him. But Pippin always turned up right enough as soon as his cage had disappeared; he had no objection to being carried free on a camel. It was the man who carried him who objected. Pippin would stand on his hind legs and lick the man's face and then lose his balance and slip and scratch his bare legs as he clutched for foothold. Then he'd clamber along the camel's neck and bark in its ear till the camel had a fit, to the infinite risk of load, dog, and rider. And so, with his pranks and his lolling tongue and that broad grin on his face, he was passed from man to man, and each submitted to his torment with good grace.

Ah, Pip, well you deserved your Arab nickname of Shaitan.

When we left Teiga a new zest had possessed us all. No longer was it a search for water; El Hamdu Lillah, that was accomplished. Now every eye was skinned and every thought was centred on the finding of Addax.

Something hidden. Go and find it.

Go and look behind the ranges.

Something lost behind the ranges.

Lost and waiting for you. Go.

When the chase is a long one; when you hope you are pulling your weight in the boat and love the labour of it; when the quarry is a sportsman and means to give you a run, all hunting is good hunting and that is the salt of the earth. But when, added to this, you are tramping the blank spaces where your own little caravan are lords of all they survey, when you follow the lure of a ten years' dream, then for a spell you have quitted this humdrum world and entered the "happy hunting grounds of Elysium."

The marches were longer now, spurred ever by the hope of tracks beyond that next rise. Long before sun-up, while that misty haze still screened the horizon the grunting camels lurched to their feet and plodded forward. We were no lie-a-beds those days, and Nimr Hassan, Mustafa, and I led the van, with pairs of scouts thrown out to the flanks. The hamla even woke to life and trod on our heels. Farah Osman, loyal servant and twelve-year-service man of the M.I., participator in many a shoot, told tall stories of bygone hunts and swore by Allah that we should never fail.

For miles we trekked parallel to, and south-west of, the flat-topped spur of Hamra Kola, another narrow isolated plateau so typical of the country, looking like some cliff-girt island rising from a cream-white sea. Then as the sun rose the horizon broadened, a dozen hazy knolls sprang into being, a few rare thorn trees breaking the monotony of that rolling expanse of sand. Scrub and grass were scanty now, but always in some hidden dip was found enough to keep the camels going. Continuously now we passed herds of Addra and Dorcas Gazelle, tame and curious at the sight of man but never confiding. As glaring white specks, lit by the sun, they appeared on the horizon, sometimes contorted by mirage to the size of camels, or to some strange beast that had no legs, or walked on his head, or sub-

merged himself in a lake that the mirage had created. For here, in the hottest hours of the day, to soothe the parched heart of man Nature provides countless visions of dwellings, lakes and trees.

Ostriches were packing now to troops of a hundred or more, once at least to start a scare of the dreaded Geraan. We passed Ostrich nests daily, a shallow hollow scooped in the sand, holding up to forty eggs, and occasionally stole an odd one to eke out the scanty larder. For scrambled eggs and custard there is nothing better.

As we neared the western neck of Hamra Kola, we began to pass White Oryx tracks, all moving westward and then one evening we spotted a herd of them. They were too far off and too wary to give a chance, but they were my first sight of White Oryx.

That night, the 12th of February, was very chilly with a bitter cold wind all next day. We had dropped the gallat or ridge of Hamra Kola behind us and, still heading north-west, were making for the Wadi Hawa.

Excitement now reached fever heat. I had a difficult chance at and missed a White Oryx, but found ample consolation in a sprinkle of fresh Addax tracks, the first we had seen, crossing our line westward. The tracks are round like those of a small ox, and deeply cloven and quite unmistakable. That was a great evening, ripe in anticipation, as I opened my heart to Nimr Hassan and broached one of my four bottles of beer, only marred by the lack of firewood. But the game had only begun.

Next day a long dark line slashed across the white desert ahead of us, and by evening we reached a belt of big acacia trees which line the dry bed of the Wadi Hawa. Here for the first time for ten days we saw fresh camel tracks going up and down the wadi and there was much discussion among the Arabs. The more timid muttered "Geraan," but Nimr Hassan and Mustafa agreed that they were the tracks of peaceful folk using the wadi as a route from Darfur to Dongola. The Wadi Hawa is a notable landmark with its belt of trees across a treeless desert. It is a hundred-yards-broad flat and sandy channel cut some six to ten feet below the desert level. It is quite dry without even the green patch of a late pool. By all accounts there are no water holes in all its length of some four hundred miles and but rarely in the best of seasons does it ever rain here. Yet some mighty flood at some time must have cut that great channel.

The next week is but a history of blighted hopes and hopes deferred. We crossed the Hawa and scouted twenty miles north into the most desolate desert we had yet seen, bare of scrub and even of the moss-like desert grass and equally so of game. Hereabouts the bleached skulls and bones of Addax, White Oryx, and Gazelle lay thick, the collection of countless ages, probably the remains of starved weaklings, who had clung to the Hawa as their herds migrated to new and distant feeding grounds.

That district was hopeless and depressing, so, recrossing the Hawa, we moved east-north-east for two days and then, dumping our baggage in standing camp, sent back to Teiga for fresh water, while the six scouts on the most hardy of the camels pushed out north and east to search for tracks.

We had been seeing White Oryx frequently of late but always in twos and threes and always in the most desperate country for stalking. Several times I had slipped off my camel during a march and had tried a thousand-yard stalk, but always without success. There was no cover of any sort, and although one might make use of the rolling dunes and thus crawl up



Plates 43—44

SUDAN DESERT GAME

BOTH PHOTOS OF ADDRA GAZELLE. ONE OF THE GREATEST AND MOST HANDSOME GAZELLES IN AFRICA. ONLY FOUND IN TRUE DESERT COUNTRY SUCH AS LIBYAN AND SAHARA DESERTS AND IN DARFUR AND KORDOFAN PROVINCES. VERY WARY AND SHY.

to 400 yards it seemed hopeless to try and get nearer, when the quarry was on the alert at the sight of the distant caravan.

Now, however, with a four-day enforced halt while we awaited our camels and water I set seriously to work to hunt White Oryx. Our camp was marked by three or four chance acacia trees while all around us were gently undulating sand dunes. Away to the south was the hazy outline of Hamra Kola, to whose western break our water camels had laid their course, to return later on their tracks. A mile or two north-east of camp a very slightly raised plateau of harder sand and small stones sloped imperceptibly northwards towards the Wadi Hawa, the outline of whose tree belt could be dimly seen with field glasses.

Scattered depressions held a few mouthfuls of moss-like grass and the spare men spent their days collecting enough twigs, roots, and dried game droppings for the cooking fires.

Hunting on foot in the desert is a tiring and terrifying game. Tiring because the going is so soft and heavy and there are so few vantage spots to spy from and the scenery is so deadly monotonous and because the distances are so great. When you do get a view which shows you bare desert for a mile or more in every direction it is not encouraging.

Terrifying because sometimes a 400-yard walk is enough to lose the camp and but little of that desert will hold a man's tracks. One day I wandered out of camp with a camel-boy in whom I had no confidence. We were not away more than half an hour, but when we turned for camp there was no sign. Trees, tent, everything had disappeared. For half an hour we trudged back while I tried to conceal my apprehension and ignorance. Then at last, as I had seen nothing of camp and we should be quite near it, I asked the boy. In mild surprise he pointed ahead. For five minutes we slogged on but there was nothing to be seen but blank, rolling desert. Then we crossed a light rise and there, 40 yards away, was the camp. It was in a slight but unnoticeable depression, visible for miles from one direction, invisible at 50 yards from many others. To be lost in the desert without water is one of my worst nightmares. But I had yet to learn that a desert Arab does not get lost.

My first White Oryx was a gift. A solitary fair-sized young bull wandered casually by the camp early one morning in search of grass and a comfortable siesta. He met a quick death all unsuspecting, served us with much-wanted meat and supplied a moderate and much-treasured trophy, the first spoils of the real thing.

The second White Oryx was the reward of some real hard tramping, distant spying, and the gem of a long stalk, snake-crawling behind a tuft of dry grass carried as a shield—the only cover. Even then I could get no nearer than 300 yards and broke a golden rule *re* long shots to pull it off by a fluke and bag a big cow of 38 inches. They are fine beasts these White Oryx: four feet high at the shoulder with long scimitar-shaped horns and a general whitish colouring tinged with chestnut on face, neck and shoulders. They are very good eating.

On the fourth day my water camels and the scouts returned, and the news the latter brought was excellent. Two pairs who had worked south of the Hawa had failed, but the third pair who had gone north had met Kabbabish Arabs camped on the Hawa who had reported having seen many Addax a day's march north of the Hawa.

"Who then are these Kabbabish camped on the Hawa and what are they doing?" I queried. "I thought that no men camped in this desert? And whence do they get their water?"

"Your excellency," replied the scouts, "these are men of our tribe and we can vouch for them. They have been camped on the Hawa for several months, they and their families and their camels and their goats. They have followed up the grazing which was bad after the poor rain in Kordofan last year. Therefore they have followed it and eaten it up behind them and will remain out till the beginning of the hot season, then they will return to their homes in Kordofan. For water they drink none. The men, women, and children live on camels' and goats' milk and a handful of durra flour. The animals live on the grazing and the sprinkle of dew sent by Allah. They do not drink during the cool six months if the grazing is good."

Later I found that these were true words. There was a large encampment of upwards of a hundred people on the Hawa who begged a cupful of water from me for a sick man, and occasionally sent a few ailing camels to Teiga to drink and bring back a few skins of water. Otherwise they and all their animals lived without water for several months of the winter. Naturally the camels did not work. The so-called dew on the grass is to me a myth as I slept out every night and saw no sign of any dampness.

These people gave me a guide to the Addax country and as much camel milk as I could carry. It was a welcome change and is very rich and nourishing but will only keep a few hours.

I wish now that I had spent more time questioning these desert dwellers. They might have given me interesting information regarding the habits of game, the people who used the Wadi Hawa route, the country in general, and possibly some of the old legends. For I am convinced that in the remote past men did either dwell in parts of this great desert or else passed across it in great multitudes. At several places along the Wadi Hawa and in others further north in Addax country I came across masses of broken pottery and now and again a few complete *burmahs* (clay pots) of an ancient manufacture and far too numerous to be mere marks of the site of a temporary resting place. Besides the Arabs on safari do not carry *burmahs* as a rule.

Yet I saw no traces of old ruins, although groups of queer-shaped mounds on unexpected patches of hard ground might have repaid investigation. When one has no digging tools and it is a race against time on account of water and the approaching hot season, archæology has a poor chance. Yet I was enough intrigued by this old mystery of the desert to be ready again to undertake this same trip, with hunting as the secondary object.

I have heard two solutions offered for these ancient traces of man. First, that they are the relics left by a migration of refugees from the south—Darfur or Kordofan—during the Mahdi's or one of his predecessors' tyrannical rule, or else that this was part of the old trade route from Kenya way to North Africa.

We left the Wadi Hawa on 20th February with a new guide and struck north-north-west. We carried as much firewood as possible on the camels. That day we marched twenty miles; we were again in the true desert as it all appears to be north of the Hawa. There was never a sign of a tree or a patch of scrub. Hour after hour we trekked up and down a

succession of small switchback dunes which looked like the heavy swell in mid ocean after a storm. The sand was very white in colour and soft, heavy going although the camels' pads made but slight impressions. There were no landmarks. Now and again in the hollows was a very light carpet of mossy grass. Addra Gazelle had practically disappeared although White Oryx and Ostriches in huge packs were common. There were large herds of Dorcas Gazelle (Um Ting), whose coats appeared lighter and more woolly and their horns smaller than usual. There was a queer sort of desert animal quite new to me, which lived in holes. It was the size of a Hare, and somewhat resembling a desert Fox with very long ears. I dared not shoot one for fear of disturbing the Addax whose tracks we now began to see.

It was an extremely hot day and a ration of four pints of water each, and one cooked meal per day, was not at all a luxury. But that night there was electricity in the air, we all felt that something was going to happen.

Let my diary of the 21st February speak for itself.

"Success at last!"

"After a ripping cold night following that stewing day I started the hamla off at 6.30 and ourselves at 7 a.m. Same kind of country, only the *goz* (dunes) got much smaller, a gentle switchback of little hollows instead of long inclines. Better for stalking though harder for spotting game until you walk on top of it. Saw more and more Addax traces, some quite fresh. Then saw a solitary tree—the first since Wadi Hawa—away north-east some miles and sent two men for wood. (It was green and they only got a few sticks.) Then about 9 a.m. the leading scout—Mustafa—stopped us short and swept us back into a hollow. I got one glimpse of an indistinct shape—I thought Addax horns—about 400 yards away in another hollow. Then I was down from my camel and following Mustafa. A sharp run across a hollow, then gently up a slope and I was staring not at an Addax but at a fine White Oryx bull—at about 150 yards. He was too big to spare, so I fired quick and by a lucky fluke, for I was blowing hard, dropped him dead with a chance brain shot. A big bull with 39-inch horns. After taking photos and leaving men to skin and cut up I pushed on. More and more Addax tracks—all fresh now. At 10.30 Nimr Hassan said: 'Enough, camp here and try on foot.' So Mustafa and I went off on foot. Very shortly we saw a solitary beast—a speck that flashed from glaring white to invisibility as he moved in the sun. We did a 100-yard stalk and found another Oryx. Left him and went on. Passed another Oryx. Forward again. Fresh tracks galore. Then we saw two beasts away in the distance. The wind and dunes were favourable and we did a long approach stalk, avoiding crest-lines and following the winding gulleys that linked the dunes. This was hot, tiring work in the soft heavy sand, with the sensation of being in a maze, as you dare not peer from a crest-line and you have no idea where your particular gully will bring you out. It needed the cool head and experience of Mustafa to lead us, as the wild excitement of stalking a probable Addax had gripped and overmastered me. That heart-in-mouth feeling almost choked me when we crossed single Addax tracks, quite fresh, leading to the very cup of dunes that held our quarry. Slowly at last we wormed up a steep dune bank and peeped over the lip. Below us, 200 yards away, were a brace of Oryx and nothing else.

"We slouched back and down mournfully. Mustafa carried his tail well down but his eyes were alert. He was not satisfied. I was—that our luck was damnable—that there were no Addax—that we had to find them and shoot one in four days or go back for water—that very soon now the wind would change to south and the heat would be on us and good-bye to hunting. You know those black thoughts and how they hustle one another and flood your mind? But we have slouched half a mile from the cup and Mustafa has halted. He is staring at tracks in the sand and scratching his head. Now he turns to me. 'No, Effendim, we must go back. There is an Addax in the hollow, that I swear by Allah. We did not see him but he is there. Here are his tracks entering but none leaving.'

"There are times when half a mile is as bad as five miles to an unbeliever, in the hot sun, but we went back. We climbed the dune again and Mustafa snaked up to the crest and peered over. Then my heart gave a bound and went raving mad, for the expression on the face that Mustafa turned to me could only mean one thing. Five seconds later I had wormed to his side, as many more and he had blessed my rifle, slipped off my topee and waved me forward, alone. It was ten yards to the top and it took years to cover, each year a joy of its own. The top was convex, five yards of agony, breathing sand and cowering behind isolated grass blades two inches long. The two Oryx came into sight, 400 yards away, browsing quietly. Was the man a fool? What's that? Hail, great Nimrod! A crane forward showed a great beast 20 yards from me, standing on the hidden downward slope—and he was an Addax bull!

"How I ever got my rifle up unseen, and how my lunatic heart ever let me shoot straight powder, only the gods know, but the wild excitement gave place to glorious success and the desire of my heart, a good Addax bull is mine at last."

With a fair White Oryx and a 36-inch Addax I did not care much what happened as long as I had my try for Barbary Sheep on the return journey. I had outlived my blood lust. In fact I think most people have, when they have lived among big game, and adopted hunting individual rarities as a hobby. But having come so far and having three days' water left I decided to try for a record Addax.

That evening showed us a score of Oryx but no Addax, so at dawn next day we left camp on camels, and with all the six scouts out in pairs. This method has its drawbacks for Addax are very shy and four groups of hunters presents a bigger target and it is hard to keep touch. On the whole, I think the drawbacks outweigh the broader front you can explore. Nevertheless I had three chances that day and threw them all away. The desert was full of white vanishing specks that day, all of which proved to be Oryx or Gazelle and I badly felt the need of a telescope. Oryx were seen to-day for the first time in herds of forty or more, and would have yielded easy stalking.

Fresh Addax spoor at last dismounted me and led me up a long gentle rise, the camels having been barracked and left behind with most of the men. For half an hour Nimr, Mustafa and I plodded on. Here I made my first blunder for I soon discovered that we were driving in front of us several odd lots of Gazelle and Oryx, and one of the latter—a solitary bull—was a marvel. I put him down at the time as well over 40 inches, as my old edition of Rowland Ward gave 39 as a record, but now that I



Plates 45—46

DONGOLA

Top and bottom. WHITE ORYX OF SUDAN AND LAKE CHAD. THEY, WITH THE ADDAX, LIVE IN FAR-DISTANT, WATERLESS DESERT COUNTRY, AND ARE ONE OF THE LEAST ACCESSIBLE SPECIES.

know a 45 I believe he was nearer 50. 'Tis always thus with the "might have beens." Nevertheless for fear of disturbing Addax I would not shoot, though half a dozen times he passed within 150 yards and would not go away. Thus I threw away a bird in the hand which I have ever since regretted, and learnt a lesson which I still fail to profit by. Take that which the gods offer when you can, and leave that which you desire most to Kismet.

Still, when we did reach the top of the incline there were three Addax, two cows and a bull in a place as flat and open as the palm of your hand. Mustafa made the approach stalk of his life and I missed the bull clean at 200 yards. I was not happy. The camels were brought up and within half an hour we spotted another single Addax 1200 yards away in switch-back dunes. He was on the move, so we did the approach stalk on camel-back at the trot along gulleys. Nimr took charge and at his discretion we barraked and came into action. We swarmed up a dune and peeped, and there sure enough was the Addax, 400 yards away, strolling towards us. We slithered down a few feet and waited, with a careful peep now and again. Closer and closer he came, but as he faced us it was unsafe to aim over our crest. And so it came about that an Addax actually walked up within 20 yards of us on to the same mound of sand behind which we crouched on the reverse slope, and then moved along across our front, showing the tips of his horns over the top and we were anchored. At last he reached a shoulder 60 yards beyond us and I was up and aiming, to be instantly spotted. The Addax gave a bound, disappeared into dead ground and retraced his track at the gallop. I clean missed three running shots at 100 to 200 yards and wondered if I should do better by exchanging my rifle for a good fruity old assegai! That ended the day and I returned to camp feeling small. The Arab, however, is a comforting soul. If things go wrong he blames fate and not himself. My rifle had been bewitched and must be made clean. So that night they made spells and sprinkled it with hot salt and murmured some incantation. That would make it all right. It did.

Next day was famous for my second and last Addax kill and the most marvellous bit of desert craft I have ever seen. It was arranged that Nimr, Mustafa, and I without scouts must go a long way round on camels, and that camp must be moved. We started at dawn and took a policeman with us on his camel to leave at the proposed site of the new camp. It would be simple enough for the camp to pack up late in the morning and follow up our spoor to the policeman, and then camp. The new site was about four miles from the old one, and from there we three pushed on for hours into the desert. Very large herds of Oryx were seen and were absurdly tame but never a sign of Addax. At noon we halted for my customary cup of hot tea and light lunch. Our fuel consisted of a handful of dry grass and dry game dung.

About 3 p.m. Nimr made a wonderful spy of a single Addax asleep, and a fairly easy stalk added a 34-inch bull to the bag. By the time we had skinned and cut him up it was 4 p.m. and time for home. Soon after we spotted a brace of Addax 800 yards away to a flank and I rushed the stalk to examine them. As the sun was down by now it was fairly easy and I got within 150 yards of them. They were a bull, a cow and a baby. Both bull and cow were fair heads (cows' horns run quite as long as bulls'),

but no more, and I am thankful to say, that sentiment won and I left them undisturbed to bring up their youngster to be a "record."

It was after 6 p.m. when we mounted our camels and headed for camp. I admit I felt "coldish" as I asked Nimr how far it was and how he proposed to find the new camp. We had been twelve hours out and although much of it had been spent in scouting in circles, in the lunch interval and in stalking and skinning, yet we must have a long way to go. The view, like all those in the true desert, was bare of landmarks. Ahead, behind, and to both flanks stretched an unbroken expanse of desert. There were no trees nor hills nor even a mound to mark our direction. There were thousands of dunes, each one like the last and the next. Now and again came a small flat plain of harder sand mixed with small stones. These generally drained into a small dry khor or water channel, but when had the rain fallen that cut them? Rarely we had passed pygmy arid hills, with miniature cliffs and gorges and water courses, but so low that they scarcely broke the horizon of endless dunes.

Such was the mournful scene of desolation that the waning light left impressed on my mind. Camp was miles away and its site had been changed that morning. The moon was in its first quarter and we had enough water to last one day at a pinch. We could always double back on our tracks but that meant waiting for daylight. However, in reply to my rather agitated inquiries, Nimr Hassan only smiled and waved forward.

For two hours we trotted steadily onwards in silence, whilst the daylight faded almost in a moment to dusk and our eyes grew accustomed to the faint light of the stars and a sickle moon.

Then we struck a bad patch of treacherous going and were obliged to pull up to a walk. Riding a camel at the walk is an agony at all times, both of discomfort and impatience at a two-mile-per-hour crawl. But when one's heart misgives one and one pictures each mile forward as one added to the impending retracing of one's footsteps, that crawl becomes a horror. After an hour's walking I suggested to Nimr that we should call a halt and bivouac and wait for dawn. But he was not to be shaken, he was a portly man, possessed of confidence in his desert craft and a hankering for the succulent repast that his slave must have prepared. Soon after, the going permitted a trot and almost at once a volley of grunts broke from my companions. Far away on the horizon a tiny pinprick of light showed like a rising star. "What's that?" I gasped. "Camp," grunted Mustafa, "Ibrahim (one of the scouts) has sense. He has climbed a dune and is burning handfuls of dry grass to guide us. Otherwise I might have overshot the camp by a few hundred yards. But it is still a long way. Be patient."

I needed all my patience and the consolation of that twinkling light, for it was a good two hours more before we reached camp.

In the plain telling, this small experience loses all its "twang." It needs the long stretches of interminable desert, carpeted with that rising pall of chilliness that comes with the night. It needs the loneliness and the brooding silence. It needs the blue-black heavens studded with flaming stars that seem to close down on one and to cut one off from the rest of the world. All these, and that lurking sense of the supernatural, are missing. For there in the desert by night one is very near the solution of the "Great Mystery."

But this finding a way across space convinced me as never before or since, of the existence of a sixth sense—the sense of direction.

The next day, our fourth and last in Addax country, owing to the water question, drew blank. Three pairs of scouts and ourselves scouted four arcs of a semi-circle north and west of camp all day. One Addax was sighted at 1000 yards, who looked as if he never meant to stop running this side of Timbuctoo. Another Addax that day almost walked into camp while we were out. They showed me the spot where he had sensed danger, 400 yards from my tent. But he had trekked in from the unexpected east, and once startled, meant travelling, they said. Possibly he was our Timbuctoo-bound friend.

By nightfall I believed the Arabs' talk that Addax shun the vicinity of man, and will never stay within a twenty-mile range of him. That once startled, they go for good and take their sons and their people with them. Certain it is that on that fourth day, while the White Oryx and Gazelle were as thick as ever, the Addax had gone. But I also believe that we never reached true Addax country, but only the outer fringe such as the White Oryx timid outposts south of the Wadi Hawa. Somewhere in that unknown desert may be a happy hunting ground where super record Addax bulls abound and where the herds will not go away.

Next day we headed south and five days later were watering our camels at Teiga Geltas, some 150 miles south in a bee-line from the Addax country. We were only just in time, as already by the 14th March the wind was variable and on the few days that it blew from the south we had a foretaste of what a hell that desert can be on a hot day. Our friends, the Kabbabish grazing party, were already packing up and on their leisurely move southward to the land of wells.

We camped four days at Wad el Haraz to rest the camels and to hunt for Sheep. It was an ideal camp in a dry river bed under the shade of thick, green, acacia trees on a floor of silver sand enclosed by the miniature cliffs of the gorge. Water was near by at Teiga.

My camel-watering party was held up by desert Lions one night but there was no mishap. All I could find by daylight was the spoor of the Lions and I regretted that I did not have the luck to bag one of these rarities.

My luck failed me over Sheep too, for although a distant spy and a long follow-up brought us to a fine ram and his family—the only one seen in those parts—the bolt of my rifle was jammed with sand at the critical moment and the chance was lost.

We now retired rapidly to Jebel Meidob to continue our inquiries for Sheep. News was not promising, although a year or two later a record head for the Sudan was to be shot in those hills. We retraced our outcoming route a day's march south-east to some likely-looking hills we had passed, only to draw blank. Finally two days further south we reached the broken and hilly country of Abu Buzma and fortune smiled again.

Camp here was carefully chosen, as here our last hopes of Sheep were to live or fall. Beyond a shady camp lay a flat, cup-shaped plateau enclosed by a ring of stony hills, linked by ridges and ravines.

As distant spying and spooring had so far proved futile methods for Sheep, we were trying close scouting.

At 3 p.m. three of us, two Arabs and I, toiled painfully up a stony

ravine amid the hilltops. Unexpectedly and all together we saw a herd grazing on a near crest-line. It was a herd of five, and they were unsuspicious, but the wind was wrong. It took us an hour to make the stalk. They were finally found asleep in a hollow, which might have been passed unsuspected a hundred yards away. There was only one shootable ram visible, who fell to my shot, while another, a better ram, escaped.

Thus ended the desert shoot, to my mind one of the most enjoyable and interesting shoots in Africa.

PART FIVE

THE WESTERN LITTORAL OF THE RED SEA

CHAPTER ONE

GENERAL

By MAJOR H. C. MAYDON

FOR several reasons it seems most convenient to include all the western shore of the Red Sea as one district. Although this territory, nearly 1000 miles in extent, from north to south, from Port Sudan to Djibouti, comes under three jurisdictions, Sudan, Italian Eritrea and Abyssinia, yet the formation of the country, the species of game contained therein and the three available ports, Port Sudan, Massawa and Djibouti, all suggest that this territory should be treated as one hunting district.

The chief reasons to support this conviction are:

(1) That this is the only true mountain district with its own special game which Africa offers the hunter. It is the Kashmir of Africa. There are many isolated peaks, high plateaux and ranges of hills scattered over Africa, but nowhere else is there a thousand-mile-long stretch of mountain country, with its own unique species of game.

(2) The hunter who has once flavoured the mystery of the western Red Sea mountains will rest ill content until he has explored them all and bagged specimens of both the African Ibex.

(3) The same language—Arabic—the same form of transport—camels and mules, the same staff of servants will serve the hunter from Port Sudan to Djibouti. Moreover, the hunter's own experience will be ripening, and although it is unlikely that the whole of this territory will be explored in one trip, it were advisable to cover it in two consecutive expeditions of three to six months each.

First let us show our wares and throw the lure to catch the hunter's eye.

Working south from Port Sudan the Red Sea hills of the Sudan contain the following varieties of game:

- (1) Nubian Ibex (record heads on the southern border).
- (2) Kudu (poor).
- (3) Oryx Beisa (almost extinct).
- (4) Ariel or Soemmering's Gazelle (poor).
- (5) Eritrean Gazelle.
- (6) Salt's Dik Dik.
- (7) Klipspringer.

(8) Wart-hog.

(9) Leopard.

(10) Barbary Sheep might be obtained in the isolated gebels to the north of the Port Sudan-Khartoum railway, but of this hunt the writer has no experience. They are not found south of the railway and do not belong to the mountain area.

Eritrea contains:

(1) A very few Nubian Ibex in the extreme north.

(2) The best Kudu ground in the whole of Africa, particularly in the north. Heads not so big as in South Africa. Average about 52 inches, but a 59-inch was shot in 1927.

(3) Heuglin's Gazelle in the Gash and Setit valleys.

(4) Abyssinian Oribi.

(5) Abyssinian Duiker.

(6) Tora Hartebeest.

(7) Lion and Leopard.

The Abyssinian Highlands contain:—

(1) The Walia or Abyssinian Ibex.

(2) The Mountain Nyala or Bushbuck (*Tragelaphus buxtoni*).

(3) Black and Red Bushbuck.

(4) Bohor Reedbuck.

(5) Abyssinian Oribi.

(6) Abyssinian Duiker.

(7) Kudu (rare).

(8) Leopard.

(9) Black Leopard (rare).

(10) Abyssinian Red Wolf.

(11) Gelada Monkeys.

The lowlands contain some of the Sudan game on the west and the Somali game on the south, but these are outside the confines of this chapter. It is worth mention, however, that the following game can be found near the Addis Ababa-Djibouti railway near the Hawash River:

(12) Oryx Beisa.

(13) Lesser Kudu.

(14) Gerenuk.

(15) Beira Antelope.

(16) Swayne's Hartebeest.

The particular and outstanding prizes of all this mountain territory are: (1) the Walia Ibex of the Semien mountains in Northern Abyssinia; (2) the mountain Nyala of the Arusi country in Southern Abyssinia; (3) Black Leopard, if you are extremely lucky.

All three of these are unique and found nowhere else in Africa. They are splendid trophies, are rare in collections, are uncommon even in their individual narrow habitat, and above all offer the finest hunting. Moreover, each inhabits the most striking country, in its way, the writer has ever seen.

The second-rate prizes of this territory are:

(1) Nubian Ibex (the best heads come from the Sudan-Eritrean border district).

(2) Kudu (good heads for North Africa).

(3) Oryx Beisa.



Plates 47—49

- Top.** KUDU. ERITREA. ONE OF THE FEW PLACES LEFT WHERE KUDU ARE STILL FOUND IN LARGE HERDS, TAME AND ALMOST CONFIDING.
- Centre.** WHITE EARED KOB. ZERAF RIVER. FOUND IN LARGE HERDS ON THE WHITE NILE.
- Bottom.** MRS. GRAY'S LECHWE. WHITE NILE. ONLY FOUND UP THE WHITE NILE AND RATHER RARE AND LOCAL.

(4) Lesser Kudu.

The intending hunter is bound to ask if the heart of all this territory cannot be explored in one trip and all the particular prizes brought to bag. The writer himself made two expeditions, one of four and the second of six months' duration, an account of which follows this introduction. In his opinion the whole territory could not be satisfactorily explored in less than eight months.

Put briefly, if the would-be hunter has not the time nor the interest to explore the whole country thoroughly and to trek through it from north to south, the best shooting grounds could be approached direct as follows.

With Massawa as port and Asmara, the capital of Eritrea, as base to make two separate treks, one north to Nakfa, across the highlands to the Kudu country and then to try for big Nubian Ibex on the Sudan frontier and back to Asmara. Roughly two months.

Then to trek south across the Gash River into Abyssinia and make for the Semien mountains via Adua on the Gondar route and try for Walia Ibex. Out again either by Asmara or the Sudan. Time required, two months at least.

Secondly, with Djibouti as port and Addis Ababa as base, to make one expedition into the Arusi country for Mountain Nyala and Black Bushbuck. On the way back to Djibouti to quit the train at Hawash station or near by and spend a few days in the hot low country for Oryx Beisa, Lesser Kudu and Gerenuk. Time required in Abyssinia, three months.

Climate.—The best months in Eritrea are from the 1st November to the 1st April. Afterwards it is too hot for comfort. During the winter the nights are cold and the days cool.

I consider these are also the best months in Abyssinia, although on the highlands it is cool enough up to June, when the rains are expected.

Servants.—A good British-trained Sudan servant should be picked up at Port Sudan if possible. Otherwise local men can be obtained at Asmara or Addis Ababa, but are not dependable. In any case try to make a short easy trek first to try out your servants before cutting off from your base for good. Arabic will be found invaluable to talk to your servants, otherwise an English-speaking man should be collected from the Sudan.

Stores.—All commodities can be purchased from Asmara or Addis Ababa. Luxuries should be taken from England.

Camp Equipment should be brought out from England.

Guns.—A medium bore magazine rifle. A 12-bore shotgun and a 22-bore rifle.

Transport.—Will be entirely camels or mules. Camels are really only useful in the Red Sea hills of the Sudan, so that mules alone would be necessary. These can be hired at either base.

Assistance at Base.—The British Legation at Addis Ababa, or the Italian officials at Asmara, are generally most willing to help. A letter of introduction is always useful.

Expenses.—I have always found that about £40 per month would amply cover my expenses in any part of Africa or Asia.

Roughly, the items are as follows:

Cook's wages, £5 per month (possibly shared).

Personal boy, £2 to £4 per month.

Stores, £5 to £8 per month.

Fresh daily supplies, £2 per month.

Transport, £15 per month.

Shikaris, rewards and oddments, £5 per month.

—£34 to £39 per month.

Game Licences and Permits.—There is a £10 licence required to shoot in the Red Sea hills of the Sudan, with a limit of two Nubian Ibex, one Kudu and one Beisa.

A low-priced licence has, I believe, now been instituted in Eritrea.

No game licence is required in Abyssinia, but travelling and shooting permits must be obtained from the British Legation at Addis Ababa. These permits are essential, and without them travel in Abyssinia would be impossible.

Finally, I would add that a shooting trip in Abyssinia is not a trip to be undertaken lightly. It needs careful pre-arrangement and some experience. It is not so much a shooting trip as a purpose to travel in almost unknown country. It is one of the last relics of the Old World. In the last fifty years, travel in Africa has become almost a Cook's tour. It is not so in Abyssinia, where not so many years ago the only motor car in the country was a broken skeleton preserved as a curio in Addis Ababa like the Dinosaurius in the home museums.

Abyssinia is the Pamirs of Africa, and its two outstanding trophies, the Semien Ibex and the Arusi Nyala, are worthy of their habitation.

THE WESTERN LITTORAL OF THE RED SEA

(Continued)

CHAPTER TWO

RED SEA HILLS & ERITREA

By MAJOR H. C. MAYDON

SOME years ago I had an opportunity to make a shooting trip of exploration down the Red Sea hills and across Eritrea. I was particularly anxious to do this for four reasons: (1) to try for a big Nubian Ibex head in the south part of the Red Sea hills of the Sudan, of which I had heard rumours; (2) to search for Oryx Beisa in Sudan territory, which are most uncommon; (3) to explore Eritrea, which in those days was an unknown quantity; (4) to see if by any chance the Abyssinian Walia Ibex (rarest of all African game) existed in the mountains of Eritrea, or if there was a new Ibex, a connecting link, between the Nubian Ibex of the Sudan, and the Walia Ibex of Northern Abyssinia.

As companions, two old friends joined me at Port Sudan, our base and starting point, who had had no experience of African travel. Hence to me fell the duty of organizing, and the language problem, Arabic.

Luxury stores were taken out from England, but all commodities were purchased at Port Sudan. Old and trusted servants had been sent to meet us from Khartoum.

A score of 100-lb. packages, dumped straight from the steamer's hold to our base at the hotel at Port Sudan, contained our tents, camp equipment, guns and ammunition for the whole trip, for this was one of the simpler expeditions when it pays to take all one's heavy kit from home.

To those who have never undertaken the "Q" branch of safari it may sound too ridiculously simple or else too hazardously difficult to be undertaken at all. To wit, the many parties in Kenya, who prefer to leave it to their white hunter and to pay heavily through the nose for the privilege. Personally my sympathies are with the white hunter. No man ought to go hunting unless he is capable of running his own bundobast, or prepared to reap the consequences of his inexperience. It is quite unfair to expect another man to do your dirty work for you unless you give him the power to say later: "Make the best of it or go to the devil."

Running the bundobast is simple if you know the ropes, but the amount of preliminary spade work is enormous.

(1) Your local servants must know their job. They must be "trek" servants and not the town product. They must know how to pitch a tent, pack and repack quickly, and your cook must be able to cook in the open, vary his dishes with no material and, above all, make bread.

(2) Water arrangements in hot dry countries. Purchase locally several iron tanks and water skins (girbahs).

(3) Route, maps, guides and transport.

(4) (a) Stores: (b) guns; (c) clothes. An entirely personal matter. Every man I know will write you a three-volume treatise on the subject and no two of them will agree on one single point.

(5) Shikaris and gun-bearers. I only know two countries—Kashmir and Kenya—where you can engage shikaris at the start and take them everywhere with you. Generally they must be picked up locally and trained to taste.

(6) Oddments and details. It is surprising how much depends on these and what a little thing will drive you to thoughts of murder of your best pal, when you have been on trek for a month or two. Here are a few trifles, quoted haphazard from memory, which greatly tend to comfort.

If you are taking glass-globed spring candlesticks, see that your candles are the best sperm, that don't get soft in the heat and blow up half-way through dinner. Take a few big china cups and relegate your tin enamel ones as spares. You will be a connoisseur on tea drinking before you have finished and enamel has a tang of its own. Make a point of buying a few pots of jam or marmalade in screw-topped glass jars, so that you have a carrier for your tinned jam and butter which keeps out dirt and does not leak. Don't buy your canvas water-bottles or tiffin basket in England. They don't understand them. The canvas leaks and the tiffin basket is only suitable for ladies' tea-parties. My favourite form of tiffin basket is a nosebag and canvas water-bucket, containing kettle, bottle of milk, cup, sugar and old biscuit-tin for bread, meat, etc. They can be tied on anywhere, don't rattle, breakages can be easily replaced, and the kettle and cup are guaranteed to suit an African thirst.

Be certain that the members of your party are tea drinkers—tea bibbers might be a better term, as mere dilettanti won't do—if they are not, they should be trained to be so. Many an incipient mutiny has been averted by a timely dish of tea. Think of a long march on a hot day with a sandstorm blowing and the transport miles behind, when the appointed camp may be from one to six hours ahead of you, when your guide is a fool and shady patches occur about once an hour. Then, when conversation is growing monosyllabic and snappy, is the time for tea. Of what avail is a long swig at the water-bottle, which gives no excuse for a bite of food and a good half-hour's rest in the nearest shade? The mere fact that you have lit your camp fire seems to mean that you have made your home for the nonce and brings repose. Moreover, tea is a stimulant which brings scorn of misadventures, it is a luxury to be looked forward to, ever present on one's saddle bow. Wait till you have missed your next big head in the bush or on the mountains and then try my panacea for all ills.

By dawn of the fourth day the die was cast. Thanks to the good services of friends in the Government Civil Service all possible arrangements had been made. By midday we three friends, four servants and upwards of a ton of baggage were seated in the train *en route* for Suakin.

Neither of my friends had tried their luck at big game shooting before, but both were keen as mustard on scatter-gun shooting, and were fired with some of my enthusiasm to wander in unknown lands. G. was an old pal of Indian days, while M., a brother officer, had trekked and

yarned with me about these very things. Sometimes I may have had qualms about introducing these two to big game as an unknown quantity, on an exploring trip, where the gun speaks seldom and where the whole charm lies in peeping behind the curtain of yon distant haze of hills, or of faring towards the land of elusive mirages across a sea of desert.

But at least I had two definite quests to offer them, the Nubian Ibex and Oryx Beisa, and they were content to shelve the killing of Lion and Elephant and countless commoner game for the future. We were out to hunt and not to shoot.

We were dumped at a desert siding half a mile beyond Suakin after dark and there amid our piles of impedimenta we spread our bedding and had our first rough meal at the gates of freedom. Twelve transport camels ordered for dawn arrived late, were loaded and dispatched ahead on the 40 miles' march to Tokar, while we, after a stroll round Suakin, started more leisurely after lunch by Ford car.

Tokar is not a place to linger in. It is a large native town situated in the middle of the flat desert strip, some 30 miles broad, which separates the hills from the sea. If you are lucky enough to know the D.C. or any of the several Britishers stationed there, don't hesitate to claim his hospitality. The rest house is not of the most attractive.

The telegraph had been busy on our behalf and our plans were laid, so that we were only delayed a day to collect our safari of 18 camels and their drivers. By noon of the second day, 22nd November, we were off. Our column consisted of thirteen Hamla (transport) camels, three riding camels for ourselves and two guides mounted on camels.

Two guides are essential, one of whom accompanies the Sahib-log and the other the slower-moving Hamla. The orders for the march and the halting place—on water, if possible—are arranged the previous evening, and the two guides are responsible that there is no hitch. In the Sudan ones does not lay one's course by roads or villages, which have an intriguing habit of disappearing without trace from year to year, but by water holes, and in the hills by wadis and watercourses which by the grace of God are reasonably stable.

Two camels carrying four ten-gallon tanks of drinking water gave us at least the elasticity of two days off water by careful rationing.

The guides were not hunters and to save their faces laid claim to no such dangerous knowledge—dangerous in that a false scent might invoke the wrath of their mad masters—and more certain still shikar means hardship, bad camps and much work. But they would lead us to country where game was and "Inshallah" local hunters might be found.

In our minds a plan was forming roughly, first to explore the spine of hills which runs north and south parallel to the Red Sea from Tokar to the Eritrea border for Ibex, and then, striking inland W.S.W., to explore the desert country which fringes the great waterless wadi of the Baraka for reputed Oryx Beisa.

See us then at noon on a hot and windy day creeping out of Tokar with a long string of Hamla camels tied nose to tail and laden, ungirthed as of wont, with every sort of incongruous burden and an ape-like retainer perched on top. Clouds of thick dust, hiding all but our immediate horizon, swirled in our faces, coating our sweating skins and blinding our smarting eyes. Strange and unaccustomed makloofas (camel saddles)

on yet stranger steeds shook us to jellies and strained new and unused muscles. We had yet to shake down and learn the peculiar traits and most comfortable speed of our several mounts.

Happily for me I was used to camel trekking of old, and knew the first few bad days it is necessary to undergo before one settles down to the finest long trekking animal there is, but my friends did not, and have admitted since that they felt ripe for murder that first night, as we struggled with a tornado to erect our tents.

Next day we were off soon after dawn, for our trek methods, as all through the trip, were to march from 6.30 to 9.30, halt till 3 p.m. with a hearty "brunch" at 11 and then march again from 3 till dark. The Hamla always reached camp an hour or so after us, thus averaging some eight hours' march per day at $2\frac{1}{4}$ miles, or 20 miles per day. I have always found this double march per day the easiest form of trekking, as two short marches are much less tiring than one of medium length, and one much appreciates the long siesta in the heat of the day.

The direction of our first morning march slanted slightly westward towards the foothills and by halt time we had entered the mouth of the big Wadi Shebat, which here debouches from the hills. It was still very hot, but we had lost the wind under shelter of the hills. Ariel and Isabella Gazelle, Duck and Sandgrouse had been seen, but so far no one had been energetic enough to barrak his camel in the sandstorm to try for lesser game.

From now on for three days we marched steadily up the Wadi Shebat, climbing gently towards the greater hills. The air was already perceptibly cooler and the nights were cold enough to need two blankets by midnight, sleeping in the open, but the sun was hot at midday. We never put up a tent at night except in standing camp, and merely pitched one as an awning for midday halt.

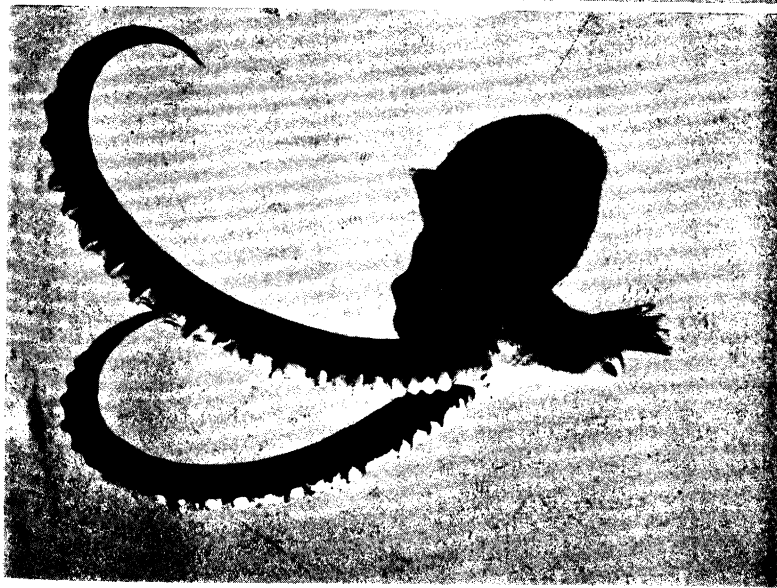
The scenery, though in no way grand, was very attractive. The dry, sandy bed of the Shebat wound and zigzagged its way amid a maze of hills, great and small, sometimes up a broad valley, sometimes up a narrow rocky gorge. The hills themselves were dry and barren, shelves and shoulders and steep slopes of grey and brown rock, carpeted with loose shale or flatter patches of hard-baked and coarse, dry grass. Along the wadi bed alone and in the broader valleys came the longed-for strip of green, where mimosa and umbrella trees cast their scanty shade.

Occasionally, from some opening, we glimpsed the higher peaks in the far background, bare of all trees and vegetation, all mere mountains in miniature, and yet attractive with the charm of all mountain scenery.

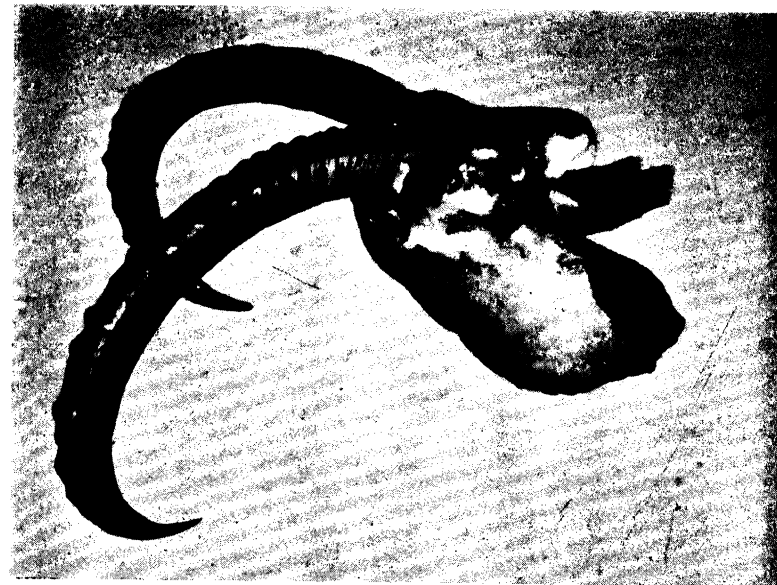
Streams and brooks and running water there were none, but at least once a day we passed or halted by water holes or pools or springs, landmarks of Arab wayfarers.

There were no villages in these parts and the inhabitants were few, nomadic goatherds, who moved their blanket shelters at will as they followed the grazing. The big rains come in July when all the wadis and khors carry their brief torrential floods; the lesser rains in December, which seldom penetrate further inland than the mountain spine and produce the strange sight of a mountain ridge, arid and barren on its western side, and green with scrub and lesser vegetation on its eastern.

To relieve the monotony of our marches ever-increasing herds of



Left. NUBIAN IBEX.



Right. WALIA (ABYSSINIAN) IBEX.

A COMPARISON OF THE ONLY TWO VARIETIES OF IBEX FOUND IN AFRICA. THE WALIA IS A HEAVIER BEAST, WITH HORNS MORE MASSIVE AND LESS DEEPLY RIBBED. THE FELT IS HEAVIER AND DARKER. THE WALIA HAS A SLIGHT BUMP ON THE BONE OF THE FOREHEAD. THE HORNS OF BOTH MEASURE 44".

Isabella Gazelle offered good stalking, and coveys of See See Partridges and hill Francolin gave good sport with the .22-bore rifles.

The nights were perfect, perfect as only the nights of North Africa can be, when Nature, relenting of her glaring parching days, throws a blue-black mantle over all and by the radiance of her stars tones all the world to gentleness.

On the fifth day we reached the junction of two steep rocky ravines called the Wadis Sharag and Mashiel, and selecting the Sharag as we had been advised, marched up it for half a day. The ravine narrowed and mounted rapidly, while the enclosing hills grew more steep and rugged and seemed to tower over our heads. Side nullahs broke in at frequent intervals and the going became more and more difficult for loaded camels. Pools of water became frequent and many a shady nook with sandy floor offered tempting camping grounds.

There were no signs of goatherds here, our guides murmuring of poisonous grasses, happily innocuous for camels, and the whole atmosphere felt gamey. We needed no persuasion to make our first standing camp some eight miles up the Sharag.

As the tents were going up, camel scouts were dispatched to get in touch with the nearest Arab encampment, and to arrange with them for a daily supply of fresh milk and eggs and to bring guides or hunters if procurable. Here be it mentioned that the supplies were forthcoming, but no guides. All through this country hunters were most difficult to secure, whether from scarcity of men or from shyness I do not know, but it is advisable if any man can be found, and he shows any adaptability, that he should be retained at all costs.

From this first camp all our hunting was done on our own with a camel-man as gun-bearer.

The early omens were propitious. Scarcely had camp been pitched and lunch half consumed, when the roving eye of M. made the first "spy" of a herd of Ibex gingerly picking its way across a face of rock high up on the far side of our nullah. He devoted himself to them for that day and the next, and I have no doubt thoroughly enjoyed himself as it was his first stalk out of Scotland and all off his own bat. He was perhaps unlucky, as although he got to close quarters with them more than once, he could pick out no real good head and finally bagged a small one. But the joy was there all the same, for, from that day, he was a made man in his enthusiasm for mountain shooting.

Meantime G. and I had been very busy climbing and unclimbing the heights to spy, and thus training our wind and our heads and getting our mountain legs. For these mountains, dwarfs as they are, of three to four thousand feet, need arduous climbing and are guilty now and again of quite ticklish places. We were using crêpe rubber soled boots, as on all mountain hunts I swear by them.

There were plenty of Ibex, if seeing at least one herd a day means plenty. But they were hard to come at. We judged their habits were to lie doggo and asleep high up in the mountain-tops by day and to come down to the wadi beds by night, to drink. Time and again a herd would be surprised early in the morning, actually in the bed or casually climbing up to their eyrie, or again in the late evenings as they potted their way down, snatching mouthfuls of haphazard grazing.

From the vantage of the heights both G. and I often spotted far-away Ibex. There was one lone ram in particular—who must have been a monster—but it was always down or up, and half a day's march distant, or Ibex on the move who had vanished before our arrival.

Several times I surprised herds of Ibex low down, but never with a shootable ram, until late one evening up the wadi bed on my way back to camp. This time there were two good rams in a small herd, and a following stalk against time and light brought me a quick easy shot and a fair head of 39 inches.

By now we had been five days at Dilbati camp and although we had enjoyed it, we felt that it was not quite the Ibex camp of our dreams, where all big rams are over 40 inches. As our time was limited, we decided that we should move on. We expected that our permit to enter Eritrea might reach us at any moment, and after much discussion over our map (is there anything more fascinating than a map?) we decided to quit the mountains temporarily and explore the north-west boundary of Eritrea. For one thing that was the reputed habitat of the elusive Oryx Beisa, there was a rumour of Lion, and that might prove the best gate of entry into Eritrea. From all accounts there was no route across our mountain group, and the only other way was via Karora, on the sea or eastern side of the mountains.

On 30th November, therefore, we were retracing our steps along the wadi Shebat to where a side nullah led westward and introduced us to a goats' track up to the Abu Khamsa Pass. Abu Khamsa—father of five—typical Arab name for five conspicuous needle peaks standing out like the stretched fingers of a man's hand. From the crest of the pass we saw the line of the hills end abruptly, stretching north and south of us, while ahead, westward, was a flat desert plain, broken here and there by sandy mounds and ridges and occasional small stony gebels. In the far shimmering distance a thin line of acacia trees marked the dry bed of the Baraka wadi.

The history of the next fortnight would have been dull indeed had it not been enlivened by the maddening hunt of the elusive Oryx—an almost mythical will-o'-the-wisp, of which for long we could obtain nothing but second-hand hearsay.

It had all started like this. I had never shot Oryx Beisa, and although they were common enough in their true habitat like Somaliland, I wanted to shoot one in the Sudan. They appear on the game licence and one hears tell of them. British D.C.'s or veterinary officers, travelling on duty, had brought back news of them. But no one appeared to have seen them, far less to have shot them. No one seemed to know where the last had been shot.

Can you think of any greater spur to endeavour?

What could they be doing here anyway, when their nearest brothers were 500 miles away south, in lower Abyssinia? They might be a subspecies—a link to the lost tribe of Oryx, the Beatrix Oryx of Arabia?

Add to this the fact that the nearer we came to their reputed habitat the more vague and confusing became the news of them. Down in the desert vale of the Baraka, wayfarers, caravans, goatherds and temporary villages became more frequent, and though water was scarcer than ever, there were pools and actual temporary plots of durra cultivation along

the dry bed of the wadi. But no one had seen Oryx—"Kundartebe," we have fitted a name to them at last—oh yes, they knew what we meant, they had heard their fathers and uncles speak of them. Yes, they had been about here. But they themselves? No, never.

And so on and on through a country, ugly, parched and desolate, the dreariest desert alternated with fields of grey-black slag heaps. And always a "haboob," whirlwind of dust and sand, was blowing.

Isabella Gazelle and the bigger Ariel and the protected Wild Ass were fairly common, and many a time, at first, one of us after a distant spy of a white speck on the horizon would dash off from the column on his camel for a closer look. But never a sign or a track of Oryx was seen.

On the third day of desert marching we reached the junction of the Ambakta and Baraka wadis, which here form the north-west boundary and corner of Eritrea. The Ambakta was typical of the new sort of deep river bed, whose kind was to become so familiar to us further south in Eritrea. These are deep-cut river courses in a sandy plain, carved by the sudden and torrential flood of waters from the near-by enclosing hills. They are neither the rocky cascades of a steep ravine, nor the broader, shallower course of a sluggish river. Hence the silt from the hills is contained between the high banks and the fertile soil is rich with tamarisk groves, palms, coarse grass and dense scrub thickets.

To us, after our long barren shadeless march, this looked like wonderland as we stared up the bed of the Ambakta over what looked like a strip of dense forest. At the first glance it promised much for the unknown land of Eritrea.

There might be any sort of game hidden there.

But a day or so brought disillusion. Except for a shady camp, ample water from broad pools, and shelter from the incessant and fierce north wind, there were no other attractions.

The only game that harboured in these parts were great sounders of Wild Pig and huge packs of Guinea-fowl, too wily to be stalked near their impenetrable haunts and thickets. Gazelle had disappeared. There were no villages to be found and there was a meat famine in the camp.

Mounted scouts, dispatched hot haste, soon produced a couple of unpromising-looking local men, both Beni Amer Arabs. They had evidently been pressed into unwilling service. They knew little of white men and less of the job of shikari. But Farah Osman, the diplomat, was sent for and told to take them away, fill them up with good food and drink—coffee with sugar was to them a luxury—and placate them with soft words and talk of great rewards.

That evening we interviewed them again. Hussein, a minor sheikh, was talkative and almost boastful. Oh yes, he would come with us and show us Oryx for certain and a good place for Ibex afterwards. Idrees, a funny, shrivelled-up little old man, was taciturn and unenthusiastic. He did not wish to come. It was a long way and we might not see any Oryx. He was an old man and very poor and his camel was a "shaitan." Moreover, he had a wife, very sick, and a small boy and a herd of goats—all he possessed in the world—who lived in a hut, and he could not leave them. But we wanted at least three hunters among three sahibs and we would take no denial. It was well we did!

The pay offered was good and an advance in cash was better. The reward (£1) offered for an Oryx was so fabulous that Idrees merely grunted incredulously. However, they were both persuaded.

Next day saw us retracing our steps back across the desert along the lower slopes of Gebel Aar and on towards Belgigho. This time we kept in closer to the spurs of the hills which loomed in a long serrated line to the east of us. The ground was more rolling and broken by many sparsely wooded ravines which drained the hills to the Baraka. Hereabouts the courses of the Khors, the Loui, the Hafta and the Mahlab ran closely parallel, and here we made our camp.

For three days we scouted on camels from morn till eve, while our spirits sank lower and lower. Ostriches, Wild Ass, Ariel and Isabella were seen and the larder was full, but no one had spotted Oryx. New strange spoor had been seen once or twice, and on the advice of the bombastic Hussein had been followed up once to prove nothing but young Wild Ass. We were growing tired of Hussein and his futile promises, while the despised Idrees remained as taciturn as ever.

And then one evening M. rode back into camp bearing the body of an old Beisa bull. Both horns were badly broken, unfortunately, but the longed-for prize was his. It had been a solitary bull and the hunt had been a good one. And it was Idrees who had achieved this amazing success. He had behaved splendidly and now seemed dazed by our acclamations.

M. reported that he had been a long way up the Khor Hafta, and that it was there, after seeing a few Oryx tracks, that he had seen and shot the bull.

At a powwow that evening it was decided to move camp at once up the Hafta to the only known water hole near the junction of the Hafta and Dabeila khors, at the very foot of the hills. There were the ruins of an old Vet. police frontier post, installed to prevent Eritrean camel owners slipping into the Sudan without registration. It transpired later that this was the gate of one of the few passes from Eritrea to the Sudan, through the mountains.

Dabeila camp was no pleasure resort. It is one of the hottest places I have ever found, an airless arid cup enclosed by red-hot hills. The sandy river course is dotted with shadeless acacia trees, and the half-mile-broad shelving banks, floored with sharp shale, lead up to the hills.

There were Oryx there, but so few and so wild that in a day we were lucky if one of us had a fleeting glimpse in the distance. However, each of us had his chance. G. at two lone bulls which gave a difficult and unaccepted chance and then disappeared for good, while I surprised two cows in the nullah bed and was lucky enough to bag the biggest in a quick affair. There was also one small herd of seven which we all saw in turn, but which gave no chance. Idrees was the lucky mascot, and hunting alone with him in turn we each had our shot.

I do not understand these Oryx Beisa of the Sudan.

In appearance and colour they are practically the same as those found in lower Abyssinia, although rather lighter in colour markings. Unfortunately I did not keep a body skin for comparison. This group that we found was undoubtedly the relics of a chain of Oryx which seem to have existed all up the littoral strip of Abyssinia and Eritrea and possibly

up the Sudan Red Sea coast some fifty years ago. I have seen them quoted near Massowa in old books and mentioned during Napier's expedition in Abyssinia. They must have been known in the Sudan to be quoted in the licence, but I have never met nor heard of anyone who had shot them previously. It would be interesting to know where they had been seen in the Sudan, whether near the coast, or right inland, cut off by a mass of mountains where we found them.

What makes it even more interesting is that we utterly failed to find them or even hear rumours of them elsewhere. We made a special circular trek around the northern boundaries of Eritrea in pursuit of them, we made the closest enquiries during our journeyings all over Eritrea, and we actually returned to the Sudan at the foot of Hagar Nush plateau and via the Dabeila Pass to our original Oryx camp in the Wadi Hafta; yet we never saw Oryx or their tracks again. My impression is that there is now only this small isolated group of Oryx left in the Sudan, who change their habitat in this narrow area to avoid the haunts of man.

As we had been lucky enough to bag a couple of specimens of Oryx we now decided to return to the mountains to try to shoot some big Ibex, and then as our permit to enter Eritrea had now arrived, to push on into that country via Karora. Eritrea was still the great attraction. It offered all the charm of the Unknown. None of our retinue had been there, but rumour peopled it with queer unknown people, bands of brigands, countless game like sheep, and pictured it as a high green country full of trees and running water.

Rumour lied as usual, but with a grain of truth, and at least we owed to it the joy of anticipation.

Once more we doubled back, recrossed the Abu Khamsa pass and followed our previous course up the Wadi Shebat, past our old turning, up the Wadi Sharag and thus on to the Wadi Mashiel. Here was some of the most likely-looking Ibex ground that we had yet encountered.

We chose an ideal camp on a patch of hard turf, sheltered by a thick and shady grove of tamarisk and watered by a babbling spring of clear icy water. The site was like a green island, stranded in a lake of sand in the wadi bed, while on all sides we were enclosed by the steep and rocky cliffs of the hills which towered beyond. The wadi here had narrowed to a sandy-bedded ravine, which bent and zigzagged amongst the heights, whilst several branch ravines fed it from both sides.

Idrees was still with us, taciturn and unenthusiastic as ever, but dazed with success and the knowledge of his rewards for three shots at Oryx. Three pounds to him was a small fortune, the price of many goats and the wherewithal to power in the land, and there was the promise of as much again for three good Ibex.

Our scouts brought us fresh milk and eggs daily, also a couple of would-be shikaris from some adjacent encampment, but still we pinned our faith to Idrees. Nor did his luck desert him, for of the four Ibex killed from that camp he was responsible for the two outstanding heads. The four Ibex measured 45, 44, 40 and 37 inches, so that we had every reason to be pleased with our shooting ground, which, moreover, yielded a couple of chances at Leopard and enough Gazelle within easy reach to fill the larder.

Mahomed Idrees was certainly the best natural shikari that I have ever

met in Africa, all the more remarkable since we were the first white men with whom he had hunted.

His hunting methods might have been learnt in the Kashmir school.

You started before dawn, rationed for the day. Idrees chose a mountain or nullah with unerring instinct. He led you up some undreamt-of goats' track—instinct again. Half-way up he left you to scale some inaccessible pinnacle to spy. It was not too early, as he wanted to catch the Ibex on their way up from water to midday siesta. This might happen several times, and always you climbed a track fit for a sahib. Then, if it was a lucky day, at last Idrees would stroll casually back along the face of a precipice and calmly sit down. He would show no excitement, no hurry. He might ask for a drink of water, and casually ask if you minded rather a nasty climb for a short distance. Then, if you knew him, was the time for your heart to leap. But I'll swear he would have spotted it if it had, and would have put you off somehow. He did not want his sahib excited, that taciturn old man !

Well, you did your nasty bit of climbing, possibly all heedless of everything bar what an unpleasant drop it would be. Then, "Good, now rest a bit," would grunt Idrees and creep off. Lastly he would beckon you up the few remaining yards to his side, hand you your rifle, and point to a ridge or rock just ahead.

"Go there and look. Use your glasses. There's plenty of time. Hua naim! Naim! (He's asleep)," and he would give a chuckle of triumphant glee. And then you would creep and look and see an Ibex lying asleep, a bare 100 yards away, and a pair of horns whose like you knew so well in your dreams. It was too easy, but the name of Mahomed Idrees stands alone in our memories.

Satisfied with our Ibex hunting we now headed south-westward for Karora. There is a fairly direct and just passable short cut from Mashiel, about four days. You cross the easy pass of Shelalta, and immediately drop into a densely wooded country of green grass and thorn scrub. Water is much more plentiful, there are many inhabitants with their herds of cattle and goats. You are approaching the coastal area of damp mists, and the winter rains of the littoral. It is a curious thing that hardly any of these heavy rains cross the higher mountains, and thus reach the arid interior.

We passed the Sheikh Kantebai's country without stopping for Kudu, along the Wadi Gamerota and reached the flat plain of the littoral on Christmas Day, to be drenched to the skin and almost flooded by rain that night. Kudu, Klipspringer, Ariel, Isabella Gazelle, Wart-hog and Bustard were all seen on the march, and the larder was full to overflowing for our Christmas dinner on Boxing Day at Karora.

Karora is nothing more than the few scattered huts of a native village, where no stores are procurable. There are two small police posts, British and Italian, with a native Mamur in charge of each.

We paid off all our Sudan camels and guides here—including Idrees, who could not be persuaded further—and recruited a fresh outfit of Eritrean camels and men, who were supposed to know the country ahead. We were lent one Eritrean policeman who spoke Arabic and proved most useful.

The plan was to make first for the hilly country towards Nakfa, on the

direct Cheren-Asmara route and there hunt for Kudu. We hoped to pick up local information and guides *en route*, first as to likely country for Oryx Beisa, and second as to Ibex ahead.

We left Karora on 27th December and for the first three marches crossed the littoral plain, slanting slowly south-west towards the hills. We passed Asaria and reaching the Wadi Falkat turned up it and reached Nimule. This was the site of a very large Arab encampment and the winter headquarters of the Eritrean Nazr Osman Kantebai. He was the big man of the district, and his people were camel owners. All his tribe and their camels were now collecting in this area from the hills for the grazing during the winter rains. From him we heard that there were plenty of Kudu in the hills near Agra, this side of Nakfa, and as most of the inhabitants had now come down, it should be easy. We could hear nothing of Ibex. There was a rumour of Beisa towards the Saleh Plain, 100 miles west-south-west, which also lay in the direction of the Khor Hafta, our old Sudan camp, and sounded hopeful.

As Agra did not lie far out of our way, we held to our original plan.

Since Karora, the country had been slowly and imperceptibly changing. There was more vegetation. Trees seemed to give more shade. The desert was not so arid, though water holes were still far apart. The hills were not so harsh and rugged. A new sort of game bird had been bagged in a wadi bed near Asarai. It was an enormous sort of Francolin, as big as a pheasant and splendid eating.

From Nimule the Khor Falkat mounted straight into the hills, a broad sandy wadi shut in by big hills, which in places narrowed to a gorge. There was plenty of running water in places, though often brackish. The surrounding hills were mostly barren, with patches of thorn scrub, but there was good shade along the wadi bed.

Two marches from Nimule we made our first Kudu camp. The first morning two fine bulls of 51 inches and 49 inches were bagged. Moving a few miles south next morning a herd was spotted on a bare, high ridge overlooking the wadi, and after a twenty minutes' stalk a good 52½ inch head was collected before camp was pitched. This was too easy, and to anyone who has hunted Kudu elsewhere, where one is lucky to see one decent bull in a week's hunting, and then probably only a fleeting glance in the bush, almost sacrilege. It's apt to give a wrong impression, and to make a really magnificent beast, carrying the finest horns in Africa, and with a reputation for sporting hunting second to none, into a stupid lumbering brute of the Hartebeest class.

Kudu in these parts are not supposed to run big, and a 50-inch in the Sudan is considered good. So we decided to spend a couple of days looking for something wonderful. Barring numberless Dik Dik in the wadis, an odd Klipspringer in the hills, and the usual tantalizing Leopard tracks, there was no other game about.

Leaving camp one morning with camels, I rode up the wadi a few miles, until I reached a spot where the wadi opened out into a broad basin shut in by small hills. There was a small thorn-bush-covered plateau above the wadi bed. This looked ideal Kudu country and the sandy wadi was full of tracks. In two hours' "still" hunting I saw three herds of Kudu on the tiny plateau. Two of these herds were quite tame, and let me approach to within 200 yards and skirmish around them for some

time. They both contained two fair-sized bulls, cows and calves, but no head over 50 inches. I finally stalked one bull and got a snap photo of him at about 50 yards. But on the way home I spotted what looked like the track of a single big bull. Next morning I was on the spot early, only to find that Arabs and goats had arrived during the night and all the Kudu had made off to the hills. After two hours' blank hunting I was giving up, when an Arab boy reported he had seen a single bull the previous evening in the small hills on the far side of the wadi. Sure enough, after half an hour's careful spying and tracking, we picked him up, and I finally stumbled on him beyond a small ridge at 100 yards.

He was standing still, looking away from us, and was an absolute gift. But he remains one of the "might have beens." He was so magnificent, and it was so easy, that I paused to make quite sure of the size of his head. A twig hid the actual points of his horns. I groped for my glasses and had time for a long look. Still the points were not quite clear. How deep was that last half spiral? And then he turned full on, and stately and calmly like some battleship moved down the slope and was hidden by a ridge. I knew he was a beauty now, and still thought he was mine. However, as I began the downhill stalk, an excited Arab boy jumped up on the skyline, and the Kudu was off for good down-wind. I spent the day after him, but he never gave another chance. Common as Kudu are in that part, if you go for an outstanding head you may get as good a hunt as you want, and draw a blank at the end.

After that, expecting to see Kudu everywhere, and pick big heads at our leisure, we made for Beden near the Saleh plain. From the Wadi Agra there is a track fit for camels leading west to Beden over a small pass, and dropping some 2000 feet to the Wadi Adobha and thence to Beden via Hasta.

Beden, though well known to local Arabs, is merely the headquarters and small village of a merchant sheikh. It is right down on the level of the plains, shut in by small barren hills. It is very hot after the Agra district, which must be 4000 feet higher. The sheikh was a most friendly person who did all in his power to aid us, and sent out camel men to make enquiries for Beisa. He knew them by name, but had never seen any in his district, although we had seen and shot them 70 miles away as the crow flies.

There was a rumour that there was a small solitary herd of Elephant in Gebel Aigat Tada (7000 feet), close to whose base we had passed. We should have liked to have seen them; a mountain Elephant must be something of a curiosity, but we were too hot on the track of Beisa to waste time on doubtful rumours.

The only game round Beden was Ariel, Isabella Gazelle and Dik Dik, and fair Black Partridge and Guinea-fowl shooting in the wadi.

When our camel scouts returned and reported no news of Beisa we were very downhearted. It was now decided to explore the Saleh Plain for ourselves, striking south for the Wadi Anseba at Sherif, and thence to follow the direct Arab route to Agordat, which lies between the Anseba and Baraka wadis, and looked hopeful for game from the map. All Arab information pointed to the Baraka on the west and the Gash River to the south as the best places for game. The plan was to explore the full length of Eritrea to the Gash, through Agordat, hoping to find Beisa

en route, and Lion on the Gash. Then turning eastward up the Gash to work towards the highlands round Asmara, keeping our eyes and ears open for Ibex. The Semien Mountains are only 80 miles from the border, and we hoped there might be Ibex on the Italian side.

From Beden to Agordat, 100 miles on the map, took us six days' ~~hard~~ marching, and was quite uneventful. It is a dull, rather hot trek among the barren foot hills. The Saleh Plain proved to be a sandy desolate strip of desert some 16 miles by 8, covered with patches of burnt grass, but no water. There were too many herds of goats for it to hold game.

At Sherif on the Wadi Anseba, we met the Nazr Mahomed Sherif, another big camel owner. He was most courteous and willing, but knew nothing of game. Beisa was quite unknown, and Ibex only on the Sudan border. All the big men on this side of Eritrea spoke Arabic, so we were not at the mercy of our guides, and the interpretation they chose to give us.

Crossing the Anseba, the usual broad sandy river bed with its fringe of dense tamarisk thickets and occasional pools of water, we followed the course of the Sarra and Heroom Wadis. These slowly mounted and merged into a stony plain, covered with long dry grass, and dotted with small groups of hills. This country—near Agordat—greatly resembled that of North-east Kordofan. The same thorn scrub, and the ever-familiar tebelDI trees along the wadis.

The only game seen was Ariel, Isabella Gazelle, Wart-hog, Dik Dik and tracks of Kudu. Greater and Lesser Bustard were common, also Black Partridge, Guinea-fowl and Sand Grouse. But most remarkable was the enormous number of varieties of non-game birds. From the huge black red-beaked "Snake Eater" and the Secretary Bird down to a dozen varieties of the most minute Humming Birds. We were not collecting them and were most ignorant, but many of these appeared quite strange to all of us.

Since the remainder of this trip evolved into rather futile wanderings and vain exploration for game, it can be summed up in a few words.

Southern Eritrea is not a good country for game. We explored the valley of the Gash River, which separates Eritrea from Abyssinia, a hot, low district of thorn bush. Here we found Heuglin's Gazelle, Abyssinian Oribi and, rarely, Greater Kudu, while from all accounts Lion and Leopard were common at certain seasons.

On the eastern side of the Hamasen plateau, 7000 feet, were Greater Kudu, Klipspringer, and Abyssinian Duiker. This was a delightful country of good climate and semi-tropical vegetation. It was thickly wooded and its steep slopes were cut by ravines with running water. Down this scarp a narrow gauge mountain railway connects Asmara, the chief town of Eritrea, with the Port of Massawa, eighty miles distant.

Nowhere in Eritrea could we hear of the big Abyssinian Ibex, save of stray heads brought by natives from the lofty Semien Mountains in Abyssinia, a hundred miles away to the south. There was no connecting link. Hence nothing remained to do but to prepare for a far greater trip into the heart of Abyssinia in the future.

THE WESTERN LITTORAL OF THE RED SEA

(Continued)

CHAPTER THREE

A SIX MONTHS' SHOOT IN ABYSSINIA

By MAJOR H. C. MAYDON

IN mid-December Blaine and I disembarked at Massawa and trained to Asmara to fit out our caravan for the Semien Mountains, and thence, all being well, to Addis Ababa.

The great objective was to be the Walia Ibex (*Capra walie*) of Semien. After that to take the shortest road for Addis Ababa, seeing the country and exploring for other game *en route*. A hunt for Mountain Nyala (*Tragelaphus buxtoni*) in the Arusi country, south of Addis, was a far-off hope in the dim future.

Time was to be no object. Failure to find Walia in Eritrea the previous year had but added zest to the hunt, and incidentally was to prove useful, in that I knew the "ropes" at Asmara.

We had brought all camp equipment and all luxury stores from England and two Sudani servants from Port Sudan, while our Abyssinian permit from Addis Ababa awaited us at Asmara Post Office.

Thanks to the advice and help of the Italian Civil Secretary and an English-speaking acquaintance in Asmara, both of whom had travelled in Abyssinia, we were able to complete our arrangements in a week. Our caravan consisted of eighteen hired pack mules, and six riding mules. The latter we bought in Asmara Suk at an average price of 25 dollars (roughly, 8 dollars to the £1). These included four for servants. Saddlery we picked up in Asmara. The Italian military pattern saddle is by far the best, if procurable. The Abyssinian saddle, price about 10s., is suitable for servants. A long picketing rope and fore-foot shackles are invaluable for the private mules at night.

Our staff consisted of one Sudani cook, two body servants, two syces, one so-called headman, and one guide. All these, bar the two Sudanis, were collected at Asmara, and could speak Arabic, Tigrean, and Amharic.

We had no armed escort, nor did we find it necessary for this northern part as, thanks to our permit, each headman of a district was supposed to be responsible for our safety; moreover, on the highlands we found the inhabitants most peaceful, and even civilized, after their manner.

As there is no smaller coin than the dollar (2s. 6d.) in use north of Addis, we were not only compelled to carry about two thousand of these heavy, awkward coins, but also many small articles for barter and for presents. Such as cheap scent, muslin for head cloths, needles and cotton, mirrors, spoons and soap and American cloth for barter; and

watches, pocket-knives, electric torches and telescopes for presents. A mule load of cheap absinthe and brandy was most useful. But almost any little tawdry articles from a "Cheap Jack" in England would be accepted in lieu of small change.

A dozen blankets and some spare large waterproof sheets are necessary for one's retinue.

From Asmara there is a motor service to Addi Ugri, about 50 miles, and thence it is two days' trek via Addi Quala to the frontier, marked by the Mareb River, and two days further to Adua. At this point the Mareb, like all big Abyssinian rivers in the highlands, flows at the bottom of a deep and broad ravine, shut in by abrupt precipitous banks. The path drops from the 6000 to 7000 foot plateau, to the valley 2000 feet below, in two hours, crosses a ten-mile-broad valley of thorn bush, stones and sand, and immediately begins to climb the Central Abyssinian plateau. It continues south for 500 miles to Addis Ababa.

Soon after the frontier we were met by a Garasmatch (under officer) with a few soldiers, who escorted us to Adua. At the frontier and in each district, sometimes only a few miles apart, is a Customs post, who tax all caravans passing through. Thanks to our permit, we were exempt.

Since we were to be inflicted with an escort most of our journey, generally changed by the headman of each district we entered, this matter calls for some further particulars.

Each district, varying in size, is apparently administered by a semi-civil military representative under various titles or ranks of Dedjasmatch (or Dedjak), Fitaurari, or Ghanasmatch. These are in turn responsible to the Ras, equivalent to the Governor of a province.

As we passed through different districts we were either waited on by, or invited to call on, the headman. There followed a tedious exchange of courtesies through an interpreter—as none talked Arabic—the examination of our permit, the offer of hospitality in the form of Tej or Marissa of the country. Willy-nilly, a Garasmatch and escort of two or four soldiers was attached to us to the next border. Part of their duties were to see that gifts of Kisra (bread), sheep, Marissa, etc. were produced by the villagers at each halt. It was most embarrassing, as they always refused payment for such, and these were not what we wanted. Milk, eggs and chickens were sometimes hard to obtain, as our articles of barter were not always appreciated. The dollar would purchase anything, but it is apt to become expensive for petty supplies in a land of no small change.

The escort is useful to help one to pass the numerous Customs posts without delay, and as an introduction to the next petty chief, some of whom were distinctly truculent at our arrival in their district without warning or sponsor. They also acted as guides, an important detail in a country where the main road is often merely one of many goat tracks. As for safety, although there is much talk of brigands, I doubt the likelihood of these attacking Europeans or any party of several armed men.

Most wayfarers we met carried rifles and bandoliers full of cartridges, but on closer examination it generally transpired that most of the latter were empties or of mixed bores! As cartridges in this country are a recognized form of coinage—three or four to the dollar—I fancy they are more for show than for use in offence.

Adua lies in a hollow on the top of the 7000-foot plateau, and thenceforth as far as Addis we were always to be in a cool, temperate climate, except for the short descents when crossing the big rivers, such as the Takazze and Abai. We were hospitably received by the local Dedjasmatch, who helped us to collect a permanent hamla of eighteen transport mules as far as Gondar, at a contract price of 20 dollars per mule, to include our shoot at Semien. After much discussion it was decided to march by the long route, via Axum, Dembegwina, Mai Tinket and Adi Arkai to Devarik, as the shorter Ataba route was reported as impracticable for loaded mules.

I would here make two notes: That if I did the trip again I would buy my own pack mules, and engage my own Nagadis (mule men) at Asmara for the sake of economy. Also I would try the short Ataba route with lightly loaded mules, sending on the heavier loads by the long route to meet me at Devarik.

Axum, one day from Adua, I will not attempt to describe, but it is worth a visit to anyone interested in antiquities and the ancient history of Abyssinia. The crowning-place of the old kings and the monoliths are existing examples of an ancient civilization that we heard of nowhere else, excepting at Lali Bela.

Six days later we reached and descended into the hot and wooded valley of the Takazze. The country from Adua to the Takazze is fairly flat and easy-going, broken by small hills and deep ravines. There are few trees, excepting patches of thorn scrub and large areas of cultivation, barley, durra, teff and linseed. At this time of year it is dry and parched, though running streams are passed every ten miles or so. It is dull trekking and no game was seen. Small villages of mud *tukls* were common, and the inhabitants were friendly and industrious. The tracks are bad and very stony in places.

It is a long, steep descent of four or five hours to the Takazze River, the first big river of running water we had met, knee-deep, 50 yards broad, and enclosed by heavy thorn-scrub jungle and tamarisk trees. The valley, only some few hundred yards across, is shut in by abrupt, rocky hillsides.

We halted here a day or two to hunt the ordinary Red Bushbuck (Dukola), which are common, while Hippo, Kudu and Duiker tracks were seen. Three days west, we were told, the river descends into the lowlands towards the Sudan, where Elephant, Lion and Buffalo can be found.

Meantime, since Axum, the high and serrated peaks of Semien had been daily growing more and more distinct. At that distance (50 to 100 miles) it looked like a huge elevated plateau rising in three distinct steps or strata, culminating in a few outstanding peaks and an unbroken line of precipices. Towards the foot it broke into innumerable great deep ravines that drained towards the Takazze. Isolated buttresses and pinnacles stood out here and there. But it resembled no mountain such as one knows, save perhaps a Cape Table Mountain multiplied tenfold, with its slopes and approaches made impregnable by natural fortifications.

My impression of the whole of the Abyssinian highlands is that of a country of plateaux, set at different levels, rent by deep cracks and chasms, and unexpectedly, anywhere, broken off from the lowlands by a line of precipices.

At the Takazze we heard that Walia might be found anywhere in Semien and hoped to avoid the long circular tour to Davarik, but on enquiry we were told we must go on to Davarik, because: (1) that was the only possible approach; (2) it was necessary to obtain permission from Dedjak Ayale, who lived beyond Davarik.

It is a stiff four hours' climb out of the Takazze valley, and for the next six days it is extremely bad going through switchback country of water-sheds and hilly ridges, up and down dale, varying from 1500 to 4000 feet, while the path zigzags so much that the actual distance is doubled. The track runs parallel to the north-west face of Semien, and being low and shut in is very hot. It is wild thorn bush or bare, rocky country and not thickly populated, but to our surprise game is very scarce. Only an odd Duiker or Bushbuck was seen.

Finally, the track mounts steeply to Dibrovár, the first step up to the heights, a narrow buttress plateau jutting out from Semien. Thence to the top is a full day's march and a regular mountaineering feat, feasible for no pack animal bar the mule. One climbs a full 3000 feet and in places it is a mere scramble up rocky steps. At last one reaches the crest and a new world. The thorn bush and rocky precipice wall are out of sight, and ahead lies a flat plateau of rolling, treeless downs, of coarse dry grass. Here is Salisbury Plain to the life. True, innumerable groups of native villages, with their stone-walled, thatched-roofed *tukls*, are out of place, but that parched plough, and here and there an isolated spinney, are correct enough. Here, and elsewhere in the highlands, a clump of trees always encloses the local church, a large thatched *tukl*, and nearly as numerous as the villages. Yet seldom has the Abyssinian villager had the energy or forethought to plant trees by his village, as shadeless and dirty and tumbledown as any in Africa.

On the top of the plateau, and a few miles from the crest is Davarik, which though shown in big print on the map, is by no means remarkable. It is the usual ramshackle native village, but the headquarters of the local headman, Fitaurari Makonnen. He was to prove himself the most hospitable, friendly and helpful laird whom we met.

Davarik is one of the districts in the province of Dedjasmatch Ayale, who lives at Davart, some 20 miles south on the Gondar road. Although not shown on our map, Davart is a much larger and more important place than Davarik, and the seat of the Governor.

Meantime, on the advice of our followers, we had sent our permit ahead to Dedjasmatch Ayale, asking for permission to shoot in Semien, most of which is included in his province. His answer awaited us at Davarik, giving us permission, and brought by a Garasmatch and two soldiers, attached to us as escort. Fitaurari Makonnen was also instructed to help us.

Hearing that we were now within a few days of the Ibex country, but that the tracks were bad, we repacked the hamla, leaving six pack mules and our heaviest loads of reserve stores behind at Davarik.

On the 30th day out of Asmara we left Davarik and struck north-east. It took us many weeks to learn the geography of Semien, but I must try and give a rough outline now.

I can but describe Semien as a high plateau running north-east and south-west, some 50 miles long by 20 broad, and varying from 9000 to

15,000 feet high. It is enclosed on the west and north sides by a line of abrupt precipices, falling sharply 2000 or 3000 feet to the lower narrow plateaux, and thence to the broken ground of the low country. On the north-east side is a huge ravine 2000 to 3000 feet deep, 10 miles across, separating Semien from the smaller high plateau of Beyeda. The southern side slopes gently and almost imperceptibly away to the mean level of about 7000 feet towards Beleza province and Gondar.

From Davarik to the northern precipice wall is a distance of 40 miles straight; a country of bare rolling downs and deep wooded ravines. This region is split by four huge folds in the ground, like elongated hill-tops sloping south-east and divided by valleys, which, shallow and gentle at the start on the westward heights, become huge chasms, draining the plateau eastward to the other bend of the Takazze. These folds divide Semien into four north districts of Adis Gey, Geech, Embarass, and Bwahit.

Two short marches from Davarik brought us to a giant chasm, the dividing line between Adis Gey and Geech, and our first Ibex camp. Although fairly easy going, the path had been slowly mounting since Davarik up to 9000 or 10,000 feet. The air was cool and rarefied, with a hot sun and a heavy frost at night. We now found ourselves at the edge of the plateau again, with a terrifying line of precipices slanting across our front. The giant chasm, which we named the "Abyss," ran inland a mile or so, and was a good 1200 yards across. It was an oblong bay cut out of the precipice wall, and its sides everywhere dropped a sheer 3000 feet to a wooded valley far below.

The very afternoon of our arrival we were shown our first Ibex. A razor-backed spur ran out into the Abyss, and from it we watched through glasses a large herd of Ibex feeding on the far side. They were 1000 yards away and apparently quite inaccessible. They were 1000 feet below the crest and seemed to be grazing on a precipice wall. Near them was a waterfall, whose water fell sheer into space.

That night our respect for Walia had risen enormously. Local natives were not encouraging. They rather jeered at the idea of Efrangi shooting Walia.

"We will show them to you. Oh yes, certainly. But you must lend us your rifles to shoot them for you. You have seen their country."

Neither Blaine nor I were mountaineers. Merely to glance over the edge of the wall gave us a cold shock.

Next day we skirted the Abyss and moved camp on to the bluff beyond, the highlands of Geech. I will try to describe my luckiest day.

Picture the camp, on a shelving plateau of short dry grass, inclining down from the long semicircular line of precipices north and west of us to a big ravine running north and south, which separates the plateau of Geech and Embarass. This ravine breaks into the Abyss south of Geech. The plateau is a succession of rolling downs, broken by stunted patches of low bush and tree heath in the ravines. Far away along the highest horizon a sprinkling of giant lobelias look like a line of sentries on the skyline. A few small villages of mud *tukls*, surrounded by patches of dry plough, seem to barely subsist. Although there is no sign of snow or ice the night has been bitterly cold, with a heavy frost. A low low-coloured mist hangs over the land, as is so common at high altitudes.



Plates 52-54

WALIA IBEX HAUNTS IN ABYSSINIA

Left. A GLIMPSE OF THE ABYSS, A BITE OUT OF THE LOFTY SCARP DROPPING SHEER ON THREE SIDES MANY THOUSAND FEET.
Centre. THE CATHEDRAL ROCK, A LANDMARK FOR MILES OVERLOOKING THE LOW COUNTRY, 12,000 FEET BELOW.
Right. LOWER DOWN THE FUNNEL OR KEY TO THE DESCENT OF GECH CLIFFS. THE ONE APPROACH TO THE ONLY DESCENT TO IBEX GROUND ALONG A FORTY-MILE FACE OF ESCARPMENT.

At 6.30 we crouched over our camp fire, wrapped in woollies and sweaters, eating a hearty breakfast and awaiting the tardy advent of our local guides. They were loath to face the early morning cold, as, unlike most parts of Africa, work starts late and continues through the heat of the day. The villagers of this part were Mohammedans, and perhaps the more welcome for that reason. At all events, we had the familiar greeting of "Salaam alek" in common. They all spoke Amharic, and we were compelled to take our syces from Asmara with us to act as interpreters into Arabic. Both these boys, picked up haphazard, turned out trumps. They became marvellously keen on hunting, and if never fliers, were a pleasant set-off to the casual indifference and utter uselessness of the average local guide.

On this particular morning, actually our third in Geech camp, we took our several ways about seven, as a hivering sun was doing his poor best to scatter the mists. A raw east wind still swept down the plateau, biting cold, and scudding cloud banks threatened rain, which never came.

As Mohammed Zeyn (syce), Wan Defrau (Davarik hunter) and I passed the nearest village, a creeping figure crept furtively out of a hut and joined us. This was Ahmed, a local man, and such was his usual behaviour. There was a prevalent attitude here that the people in common resented our visit and did not want the Walia shot. Therefore any local man giving us assistance must do it in secret. A futile pretence, of course, but one they stuck to throughout.

At the risk of being tiresome I must introduce you to Ahmed, a rather typical character of this country of intrigue and bribery. He was an oldish man, clad in a filthy old "chamma," who owned a hut in the village and a few cattle. He had been tending these on the brink of the precipice when I first met him, as I was exploring a tempting-looking ravine the first day. He had demanded our business in a few curt questions. He had shown a sneaking, underhand curiosity in me, fingering buttons, field-glasses, rifle, etc., and jerking out questions. Suddenly he had evidently agreed to show us the way down from the heights, by no means easy at first sight, and led off. As we crept down a wooded buttress in extremely gamey-looking country, he suddenly halted and demanded what I would pay to shoot a Walia. The terms at last agreed upon, after much haggling and even demands to see my money, he took the lead again. Within half an hour I had shot my first Walia, probably a moderate one, whose horns were unfortunately broken off short and lost for good in the huge drop the animal made when shot.

To-day Ahmed had agreed to show me more Walia.

A mile or so north-west of our camp, the plateau slanting upwards, ended in the precipice wall which, as we were to learn later, continued practically unbroken from Davarik to Bwahit, at least 40 miles west to east. The Geech section of this precipice is a distance of about 8 miles. As a general rule, from the brink of the plateau there was a sheer drop of about 200 feet to the second step or lower narrow plateau, and from there the land, much broken by isolated peaks, buttresses and deep wooded ravines, shelved rapidly down to the low broken country of about 3000 feet altitude.

The top of the plateau was bare, save for occasional sparse groves of lobelias, but a few hundred feet below the crest, the ravines, and some-

times a sheltered slope, were densely wooded with tree heath often 20 feet high.

Thus early in our experience we had but one method of hunting. That was to make for the brink of the precipice and then to follow it round, spying downward from each point of vantage. A little search had proved that the precipice in places was not so impossible to negotiate as it had seemed at first glance. There were broad grassy ledges, and heath-covered buttresses, which could be reached on close investigation, though viewed from a distance they seemed inaccessible.

The idea of finding Ibex in forest country was so strange to our minds that for a long time we confined our attention to the grassy slopes. It was not till near the end of our six weeks' visit that we learnt that the patches of tree heath are some of the Walia's favourite haunts. The bare rocky hillsides, the home of the Ibex of the Red Sea hills, are practically non-existent at Semien. Nor is the Walia confined to known areas for grazing and water.

A conspicuous ravine being the dividing sector between Blaine's and my hunting ground, on arrival there we began in earnest.

Even that short, gentle climb had pumped me badly, unaccustomed as yet to the 12,000-foot altitude. Wan Defrau, who was keen and active, one of the few such I met, hopped like a monkey to each lofty spying place. He acted under the guidance and advice of Ahmed, who followed more leisurely and never put himself out. Wan Defrau was unfortunately a stranger to the locality. From lack of breath I had to content myself by trailing behind by the easiest route, and trying to pick up with field-glasses anything they missed. Mohammed Zeyn acted as connecting file.

Within the hour, an excited Wan Defrau had dragged me up a knoll to inspect a couple of Ibex he had marked on a grassy ledge, quite near the top. Seen through field-glasses they were undoubtedly female and young, but on the chance of a male in the offing, Wan Defrau and I stalked them, while Ahmed placidly sat on the heights and watched proceedings.

It was an easy stalk downhill and we got within 50 yards of them unsuspected, and watched them for some time. It was wasted energy as there were no others, but I was glad of a close view of a female Walia. They are smaller than the males, much lighter in colour, a dirty dark grey, carry short curved horns up to about 12 inches, and have none of the handsome appearance of the males. When alarmed they give a shrill, sharp whistle like a Klipspringer.

Leaving them, we regained the top and passing through a regular plantation of lobelias, pushed on northwards. For the next mile or two the precipice was a sheer wall of rock, where not even an Ibex could have found a foothold. Beyond was a long bare ravine and a sharply shelving slope, split by a rent—a narrow, bottomless chasm—from a razor-back ridge, which ended in a solitary peak. All this was below the plateau level, which here bent sharply eastward, and was commanded by sharply rising ground. Here we halted for a longer spell, as it was an ideal spying point.

After an hour's futile spying, and having lost touch with the others, I was moving off to explore the bare ravine, when I heard a whistle. The indefatigable Wan Defrau signalled for me to join him on the heights

above the shelving slope. From there he pointed to the narrow gorge. With my glasses I could barely make out several Ibex, but whether rams or females it was impossible to see. They were under the lip of, and on the far side of the chasm, which at that distance looked a bare 100 yards broad. On account of the wind we had to approach from this side.

Again it was an easy downhill stalk of about 1000 yards; but after a short descent we lost command of the chasm, which likewise meant we were under cover too. My last impression as we moved off was of Ahmed again placidly sitting where he could watch operations, quite unmoved, quite determined not to exert himself. As we sighted and then cautiously neared our edge of the chasm, I kept wondering how wide it really was, and would there be a fine ram sitting for me?

Alas! Wan Defrau reached the brink first under good cover of some stunted bushes, and his expression as he beckoned me up the last lap was forlorn. A moment later and Mohammed Zeyn and I were at his side and peering across. My heart sank to my boots, for what had appeared a mere fissure was a yawning crack a good 300 yards across, which seemed to cleave down to the bowels of the earth. On the far side and slightly below us were seven Ibex grazing, in places where only a Mountain Goat could graze. One by one I examined them through glasses and then sank back with rather a sigh of relief. Any fool could see that it was impossible to get nearer and still keep them in view, and 300-yards shots are not my speciality.

"All females and young," I whispered, and Wan Defrau nodded despondently; but none of us were in a hurry to leave the spot. We each examined every inch of the opposing wall, from the head of the crack, right-handed, to out and around the isolated peak that loomed over space. That's where they must have come from, but there were no more.

I retired a yard or two and pulled out my lunch, always the best panacea for blighted hopes. With my mouth full of bully I was startled by a stifled cry.

The other two were craning over the brink, but the way Mohammed Zeyn's arm thrust the rifle at me meant more than words.

There was alarm among the herd on the far side. I saw them gather and string out along a vague unnoticed game track, heading outwards for the curve below the peak. Then the rattle of falling stones carried my eyes to the right, towards the head of the crack. With a hop, a skip, and a jump, picking their way where no way was, but moving fast, came five more Ibex from Heaven knows where. They were heading to join the other herd. Viewed with bare eyes, one of the string stood out by himself. The sun caught his long, sweeping horns, he was bigger and much darker in colour. One glance with field-glasses was enough. A whopper! Well, 300 yards or not, I'll have a bang; it's no use havoring now.

Like a gentleman the big ram paused for a moment at a ticklish place, to let his lady clear it. My first shot was a clean miss, but my second dropped him, the fluke of a lifetime. The rest of the herd vanished, but we three sat powerless and watched and prayed. Lying on his side and feebly kicking, the Ibex slowly slid down towards the bottomless pit. Inch by inch, checked for a moment by a stone or a tiny ledge, then on again. I tried a third shot but if anything it only quickened the end. A

sudden sharp final slide and he shot over the edge and plunged out of sight. Ages after came a dull thud. Mohammed Zeyn burst into tears, my own feelings exactly. This was the second time we had seen this happen in three days. For two years I had dreamt of Walia, and this time we knew it was a real big head. Could any man recover it?

As we peeped and craned over our brink, no longer hampered by need of concealment, we saw a narrower ledge 50 feet below us, which finally led round to where the Ibex had been. This, of course, is where our friend had been before the alarm, but so far down that it looked inaccessible. As we reconstructed the happenings and bemoaned our fate, Ahmed, the unperturbed, joined us and with him a local cowherd. Again it was a question of price. "Undoubtedly a way down could be found, but it was difficult." It was. But by help of reims (leather ropes) and a third man they did it, step by step, down a place it gave me the horrors to look at, and found the Ibex caught in the head of a tiny gully 500 feet below. Both his horns were broken off short but intact, his skull was a pulp and most of his bones broken, but the skin, mask and all, was sound. He was all gentleman, that old ram, he had not lied in his promises, he was a 44-incher.

Did Ahmed go and help in the recovery? Oh no, he sat on the brink and shouted directions.

Next day Ahmed began to throw out hints that if I would make it worth his while, he would show me a way down the precipice and a new place where the biggest rams lived. The same day, however, came a set-back, and before that was cleared, Ahmed, either in a huff, because he did not think his reward was big enough, or to tend his threshing across the valley, had gone away.

A month later, however, when all seemed hopeless, Blaine was to find that way down the cliffs, and the key to a favourite haunt of big rams.

The set-back I have mentioned was this. On the second day Blaine, after returning from a blank hunt, tired and downhearted, was summoned by a scout to come and see an Ibex in the Abyss, which though the most awesome place on earth, was not quite so impossible on this side. I won't spoil Blaine's story, but briefly they got down far enough between five and dark to spot and shoot a fine ram of 41 inches, with very massive horns. He did not fall far, luckily, but Blaine could never get at him, and he had to be skinned and brought up by ropes next day.

That was three between us in three days, and we thought it too simple. Then the Garasmach, O.C. escort from Dedjak Ayale, and probably acting as spy on our actions, threw his bombshell. By Dedjak Ayale's orders, he said, we were only allowed to shoot two Walia each, and I must cease hunting. Expostulations were in vain, though we had two written permits, one from Addis and one from Dedjak Ayale himself, and no restrictions as to numbers had been made. We had to send one of our followers back to Davarik, asking to be allowed four each. That was four days' delay. Meantime Blaine went on hunting, but as if the spell of luck was broken, he could never see anything but herds of females. He felt that the rams were there, but always invisible, always in some inaccessible part, half-way down the cliffs. And we knew no way down. There had been rain at Semien just before our arrival, and the native yarn was that the rain always brings the Ibex up to the top; that the precipitous slopes become



Plates 55—57

ABYSSINIAN GAME

Top. MOUNTED SPECIMENS OF WALIA IBEX, MALE AND FEMALE.

Centre. MOUNTAIN BUSHBUCK (OR NYALA) SHEWING HIS TREE-HEATH HABITAT.

Bottom. WALIA IBEX. THE ONLY ONE, ON THAT SHOOT, WHICH DID NOT FALL DOWN A SHEER PRECIPICE.

unsafe; that in the heavy rains in July all the Ibex can be found on the edge of the plateau. Therefore we had been lucky.

Then our permit to shoot four each arrived, and we decided to move on to fresh ground.

I will not attempt to follow our wanderings of the next month. How we followed the precipice round north-east to Argeen, sister rampart to Bwahit, which towers up to over 14,000 feet and whose streams seem always frozen. How at Argeen I saw a big ram asleep 500 feet below me and could not get at him. How we descended the recognized pass beyond Argeen to the lower plateau and went to Lorie Mountain, reputed to be a sanctuary of Walia, belonging to the church there. Whether the priests were unwilling or not, I don't know, but we drew blank, with strong suspicions of hanky-panky and of woodcutters who shouted at odd times and in queer places. How we separated, and I did a regular circular tour of Argeen from below and found the Ibex too far above me. Back to Geech and could not get down. Back to Davarik on a wild rumour of Ibex in a new far mountain, and thence on a new route via Enchetkab to Beyeda mountain, with two more Dedjasmach to be appeased, and a seventy-mile journey across mountains and over passes, only to find myself at the end on the north side of Bwahit, and next door to the hated Lorie.

Beyeda is a detached mountain plateau of its own, and separated from Bwahit by a huge ravine, 3000 feet deep and two days' journey to cross. There are Ibex there, but I saw no ram over 20 inches. It is easier hunting ground, and I fancy the native gunner takes a heavy toll.

Meantime I had heard from Blaine that he had found a way down at Argeen and bagged a 30-incher, so despairing of my district and bone-weary, I cut across the north slopes of Bwahit and found Blaine at Geech once more.

We took counsel. We were both at our wit's end. We agreed that there were big rams, who lived apart from the herds, but they were very few and far between and always in the most inaccessible parts, below the top precipices, and in the deep ravines and heath forest. We agreed to try one final week and then to start south. Blaine gave me the secret of the descent at Argeen, where he had seen two big rams. He was resolved to stick to Geech.

As I left for Argeen, another local man, tempted possibly by hopes of reward, showed Blaine a way down at Geech. Worse than a goats' track, it commenced in a cleft in the precipice wall, and following a dry water chute, led to a ridge-like promontory and a detached peak 2000 feet below. A few blankets and cooking-pots were man-handled down, and Blaine made his camp for a week under the isolated peak. From here, looking back, the cliff walls were opened to him on both sides, and the key to the ledges below them.

For the last week I fancy Blaine had one of the best hunts of his life. Each day from his camp he spotted Ibex, all and only rams, and one or two real big ones. First he risked a far too hurried shot and lost him. Then another day spying a big ram asleep, he patiently waited all day for him to get up and thus make it a certainty, only to see two big rams appear stampeding from nowhere and for no reason, startle his own quarry and all disappear together. Finally, the very last morning of our agreed limit, his luck turned. He had marked and daily examined a

favourite resting-place of a solitary big ram on a tiny ledge above a patch of forest. That last morning the ram was at home. It was a long and exciting stalk, for twice the ram rose and snuffed suspiciously and then lay down again. But there was no mishap this time, and at his shot the ram straightened up, crumpled and slithered down into the patch of heath. He was a very old ram, huge, dark and shaggy, carrying a splendid, very massive pair of horns of 38 inches, shorter by the tape, but the most typically massive head that we shot. Moreover he was the first and only Walia that we were able to approach when shot, for those delightful moments of photographing and measuring.

Almost at that identical moment I was doing a breakneck descent of a rocky funnel in the precipice, to approach a herd spotted from the top, after a blank week at Argeen. Three hundred feet above them the funnel ended in a sheer drop down a narrow waterfall. There was one ram, whose horns, viewed directly from above, looked very good. The first shootable head I had seen for five weeks. At my shot he disappeared for ten minutes behind a boulder, then staggered into view and rolled over dead. We could not collect him till next day, when men had to be lowered by ropes. To my disappointment he was a poor head of 31 inches.

Thus ended our shoot at Semien, and considering the rarity of big rams, the difficulty of the country, and the "passive resistance" of the local natives, we were satisfied.

There is no doubt that they are much hunted by natives and the horns are either presented to the headmen, or sold locally. They are said to be cut down and used as drinking horns. We were shown a dozen or so of such picked-up or shot heads. Generally one horn is broken, and often both horns are broken off the skull, so my ill luck is by no means unique. Of these none measured over 43 inches and the most massive are not the longest.

Of other game seen at Semien, Klipspringer are the most common. There are a few Duiker, and on some of the more desolate grassy plateaux the Red Wolf is common. There are large troops of Gelada Monkeys nearly everywhere, a unique and very fine pelt of that class. Blaine's heart was gladdened by bagging one of the rather rare Lammergeyer Eagles. We returned to Davarik and heading south made for Gondar via Davart.

The trek from Davarik to Gondar is roughly 50 miles and there is nothing worthy of note. Unlike the approach to Semien from the north-west, the land slopes imperceptibly down some 1000 feet to Gondar, through the usual country of rolling downs, small hills and rare patches of bush.

We called on the Dedjak Ayale, *en route*, who struck us as being by far the most Europeanized and powerful headman we had met. He had spent much time at Addis Ababa.

At Gondar we stayed several days to pay off our old hamla and re-engage a fresh one. The Nagadis there are rather independent and maddening in their disregard of time. Finally, at the contract rate of 20 dollars per mule and after many postponements, we set out on the 300-mile march to Addis via Lake Tsana.

At Gondar we were most hospitably received by the Italian Consul, at that time the only European there, and the first we had met since

leaving Eritrea. From him we had our only news of Europe of the last three months.

The ruins of the old Portuguese castles at Gondar, built during their occupation in the fifteenth century, are some of the most interesting things we saw. Although no effort is now made to protect them, they are still in a remarkable state of preservation, and the shells are almost intact. The largest ruin, enclosed by a broken wall some 400 yards square, includes the main castellated building of three stories, with enormously thick stone walls, a bastille-shaped keep, a chapel, the house of a prelate and many other ruins of forts, stables, guard-houses and dwellings. One is struck by the substantial workmanship and the imposing grandeur of the ancient ruin, in comparison with the straggling, ramshackle, and dirty Abyssinian town that now surrounds it.

Space forbids more than a passing reference to the long, dull march from Gondar to Addis. As an experience it is worth doing once, but from a shooting point of view it is a waste of time.

Our route lay down the eastern shore of Lake Tsana, across the Abai or Blue Nile River at Dildil, where is an old Portuguese bridge, up and across the Gojam plateau via Mota, Debra Werk, and Muger. Then recross the Abai at Dejen and thence to Addis via Milki, Salali, the Muger River and Silulta.

Except for the Abai and Muger River valleys, which are in the usual deep depressions, the whole route is across elevated plateaux and stretches of hilly country. Everywhere are villages and much cultivation, mainly barley and teff, and durra and grain in the lower parts.

Lake Tsana lies in a depression at some 5500 feet altitude and on the east bank is a margin of rank grassy plain, shut in by small foothills. It is very dull, with low flat banks and muddy water. The only game we saw there was a multitude of Wild Duck, mostly Spot-bill, Pochard and Widgeon in the creeks.

The Gojam plateau was by far the most attractive country we saw north of Addis, with its rolling stretches of green grass, numerous streams, and pretty woods of green, flat-topped acacia trees. Although seemingly it was very fertile, it was not so thickly populated as usual. Bohor Reed-buck are very common near Debra Werk, otherwise occasional Oribi, Duiker, and Red Wolf were the only game seen.

The "small" rains had commenced at Gondar in March, and we now had almost daily storms until we left the country in June. Although rain was very annoying on the march, there is no doubt we saw Gojam and later Arusi country at their best, when all the trees and grass were green and fresh.

The southern bend of the Abai would be impossible after heavy rain, but we were lucky and made the crossing with little difficulty during a lull in the rains. So close to its source at Lake Tsana, the river rises and falls very quickly.

Once beyond the Abai it is plain sailing to Addis Ababa and we found ourselves in a stream of Nagadis and laden mules making for the capital. The path crosses a flat and very dull plateau broken by the Muger River at the bottom of the usual deep ravine. On the heights above the Muger and within 50 miles of Addis, we saw Gelada Monkeys again, as well as Bushbuck, Klipspringer and Duiker, in fact more game than anywhere south of Gondar.

One point is worth mention. On two occasions we had private riding animals stolen by night in the most barefaced manner. With ponies at a pound or two and mules at three or four pounds it is no serious loss if they can be replaced, but even if one is morally certain that they have been stolen by local people, and possibly are hidden in the nearest village, there is no redress. Here is the chief use of an escort, who at any rate can be made responsible. South of Gondar we had no escort forced on us and except for these losses, had felt no lack of one.

Addis Ababa lies on the slopes of a small chain of hills at the southern extremity of a fifty-mile-long, flat and treeless plateau. It lies in quite a forest of eucalyptus trees, hand planted and a welcome change after the bare plateau.

After four months on trek we were quite comfortable at the Imperial Hotel and most hospitably entertained by the British residents of Addis, and thus enjoyed a week's rest while we refitted for our Arusi shoot.

We paid off all our mules and old retinue, bar the two syces from Asmara, now promoted to body-servants, and refilled our store-boxes, as most stores are procurable at Addis. The Legation were now kind enough to help us to find a new staff and Nagadis, who knew the Arusi country, and had been there with shooting parties before. With all due consideration, I do not recommend this. It saves an immense amount of trouble, but to the poor man and the keen hunter the results are unsatisfactory. These "old hands" know too much. They are all on the make, and they know the old shooting grounds so well, that they are obstinate about trying new.

Moreover, despite an escort of four men, paid by us, and useless for work and merely a form of chaukidar or bribe against theft, we had a laden mule stolen on the march, carrying all our reserve stores.

Mountain Nyala have been hunted by so many people nowadays that it seems great presumption on my part to try to write of it. My queer excuse is that I did not make a great success of it. Therefore let the old hands gloat over my mistakes, and let the new rub their hands and say, "Well, I shouldn't have done that." As long as they don't when the time comes, my purpose is served.

Another reason is that although I have met and talked to many people who have shot Nyala, I had no idea in my head as to the type of country, the hunting method, the scarcity or otherwise of game, and whether they were hard to get or not. After chasing Walia in Semien I was inclined to despise them and hoped to rush the shoot in a month.

Experience has changed those ideas.

Modjo railway station, about 40 miles south-east of Addis, is the first day's lunch stop out by rail. This is the usual starting-off place nowadays for Nyala country. The baggage mules are sent off two days ahead and pick up their sahib at Modjo. Blaine and I elected to trek down with our hamla. It is two and a half dull, easy marches to Modjo. The country is the usual rolling grassy downs, broken by a few isolated hills and an occasional shallow stream. From Modjo to the Hawash is one long march, mainly downhill, through rocky, broken ravines. The Hawash is easily fordable except during the big rains. After that it is nearly 10 miles to cross the broad, flat, grassy valley, studded with villages and swampy in places. But there were no mosquitoes at that altitude (about 6000 feet) in May.



Plates 58—59

SUDAN

Top. NUBIAN IBEX. A VERY FINE HEAD, SHOT IN THE RED SEA HILLS.

Bottom. GIANT ELAND, AS FOUND UP THE WHITE NILE.

From the south side of this valley is a 20-mile waterless march through thick bush, climbing gently all the way. This brings one out into open country again, with many villages, streams and occasional clumps of trees, on the lower slopes of Chelalo Mountain. Hence it is a gentle, steady climb of 15 miles up to the nek separating the two peaks of Chelalo east and west, about four miles apart. The altitude here is about 9000 feet, and it is chilly enough to need a tent and all your blankets at night, and thick clothes or a woolly, most of the day.

One is now in heather or tree-heath country varying from knee-high to over your head. The nearest comparison, and a close one, is to the moors in Scotland. But I think to speak of mountains gives an utterly wrong impression. One is starting at a mean altitude of 7000 or 8000 feet. There are gentle undulations and depressions, and an isolated peak or ridge stands out perhaps an odd 1000 feet. I found no hard climbing and no ticklish places.

From Chelalo nek the path passes two conspicuous little lakes and drops gently through the heather some 10 miles to Albasso, a densely wooded, park-like district at the north-east corner of a 20-mile-broad plain, which gently slopes down to Lake Dumbelo, south of Lake Zwai. This plain is enclosed by the twin Chelalo peaks, the west side of Tichu ridge, which connects with Kaka and N'Kolo Mountains to the south.

It was a bitter blow, to me at least, to find Mountain Nyala by no means the easy quarry that I had expected. We had arrived tired out from our long trek to Addis, neither of us very fit, and with that high-strung feeling when the gilt and zest have gone from camp life, and the civilized part of one is yearning for the flesh-pots. Add to this almost daily heavy rain, bad servants and a worse cook, the loss of most of our most important stores, and an increasing dislike of the Habishe, and it is no wonder that one at least of us prayed for lots of game, minimum of fatigue and a speedy ending.

Very different was the realization, and personally I found Mountain Nyala as difficult as any of the wary sort of game.

From our experience we found two sorts of hunting. Either in the heavy tree-heath forest, down in the flat country, broken by multitudinous ravines, running down from the slopes of the hills, such as Albasso, or else up on the higher slopes of the hills, densely covered by heath, in various stages of growth, such as Chelalo, Kaka, and the hill-tops south of the Webbi River.

As a start we halted at Albasso four days, and the first day everything seemed splendid. We had the most ideal camp on a high grassy slope in the midst of the forest. There were huge shady trees everywhere, green turf, and a cascade of crystal icy water in the deep wooded ravine at our tent door.

The first morning out I jumped a couple of Black Bushbuck and a couple of the big Galla Oribi within ten minutes, and later saw Reedbuck, Duiker and still more Bushbuck and Oribi. I had decided to leave everything alone bar Nyala. We saw plenty of Nyala tracks in the forest, especially in one deep ravine, with rather open grassy banks. Following this down, I flushed a herd of females, and later, when spooring up, a very large herd of Nyala broke back and past me. Evidently they had been startled by some natives, as the forest here was full of villages. A dozen

or more, all females, dashed across my front, while six or eight broke past my left in the open at 50 yards at a slow canter. The latter were led by a full-grown bull, followed by several smaller ones. It was a fairly easy chance. Unfortunately, over-confident that the place was full of Nyala and that I could choose a better head at leisure, I let them go.

Within twenty minutes we spoorred up another herd. This time across an open glade we spotted a female on guard, and in the deep shadows and undergrowth behind, the vague shapes of others and the hazy outline of horns. It was quite impossible to risk a shot, and in trying to manoeuvre round to see better, they were away for good.

In the evening I glimpsed two herds of Nyala, the last being a cow and a bull. A snapshot at a questionable bull would have been possible. From then on game grew scarcer and scarcer. I never saw another bull Nyala there, and even other game seemed to disappear. Blaine did have one possible chance at a bull Nyala. He heard some Galla boys shouting in the forest one day, and then saw them chasing a herd of Nyala cows towards him. Seeing no bull and vaguely curious, he made for the brink of a ravine to head them off. He did not even take his rifle from his gun-bearer. The herd broke out quite near him, and it was headed by a fair bull, springing from nowhere.

Comforting ourselves with the idea that Albasso was on the main route to most Nyala centres and was probably shot out, we decided to push on direct to Lajo, on the south side of the Webbi River.

It is a long two days' trek south to the neck between Kaka and N'Kolo hills. It is easy going along the lower slopes at the back of Tichu ridge, mainly through thin forest and across countless ravines. We were tempted to break the journey for one day and make a futile hunt higher up the ridge. Nyala are everywhere, but this was a bad spot, and we were much troubled by the lack of any sort of trained hunters. The usual Galla guide was utterly useless. He would crash along as fast as he could, was very bad at spotting, hopeless at spooring and did not seem to have the faintest idea of the usual haunts and habits of game. But we were beginning to learn that it was unlikely to find big bulls with the herds, and that the higher open heather country was the best place to hunt.

It is a very long, dull and tiring march from the Kaka-N'Kolo neck down to the Webbi River, of about 20 miles of open grass country, very stony in places. There is a bridge over the river, but we struck west of it and found it easily fordable. At this point the river flows between low, flat banks at the bottom of a gently inclining 30-mile-broad valley. Twenty miles east I believe the valley banks are precipitous and it takes two days to cross.

We had picked up a guide who had wonderful yarns of "Agazain-like cattle," and he led us up into the hills on the south side of the river, some miles west of Lajo through a part called Saboro. We were riding ahead of our hamla and as a very heavy rain-storm with the usual thick mist continued the whole afternoon, and our objective was vague, we lost our baggage. As we were wet through, and had no food or blankets, it looked like a bad night. However, of all unlikely places, in a small Galla village we found a man who talked Arabic well, had been to Mecca, Alexandria, Port Said and Khartoum, had worked for the Sudan Government, and was well educated. We felt at home at once and were very hospitably

treated. We were given an empty *tukl*, not too dirty, plenty of firewood, eggs, milk, chickens and coffee, and spent not too bad a night. Our hamla did not turn up till the following evening as, after the usual lackadaisical custom of Habishes, they sat down only three or four miles away and waited for us to find them.

Pushing up almost to the top of the hills south of the Webbi, through thick heath and conifer forest, we camped on the heather line at about 9000 feet altitude. We stayed here five days. We saw plenty of tracks, but although Blaine bagged a couple of moderate Nyala and formed a good opinion of it, I saw no bulls and hated the place. I blame the want of any sort of hunter and general unfitness. Blaine had to work very hard—ten hours every day—all on the bleak and desolate heather-clad tops. It was a good place for Black Bushbuck in the lower forest.

Thence we returned to Kaka Mountain, famous for Nyala, but undoubtedly overshot. We heard of nine bulls being shot there this season by white men. We saw a few poor bulls but nothing worth shooting. It rained incessantly, so we left quickly for Albasso again.

We camped this time on the very bank of the big grassy ravine where so many Nyala had been seen before, and within half a mile of a village. I caught a fleeting glimpse of two bulls the first evening, but after that for four days nothing but cows were seen. Everything was very wild, and Blaine failed to get a Black Bushbuck, though there were plenty about, a flitting shadow in the dense forest. We found a regular salt-lick at the foot of a cliff in another deep, densely wooded ravine. But although full of tracks, we were never lucky enough to find a bull at home.

There was now a spell of fine weather, and a very heavy wind day and night. We decided to split camp, and while Blaine made for a conspicuous little stony hill above and about six miles east of Albasso in the open heather country, I made for the south slopes of Chelalo west, six miles north-west of Albasso. I left the forest behind and camped on the fringe of open heather. Water was plentiful in regular Scotch burns, as is the case all over this country. It was generally very cold and damp at night, which made a huge camp fire all the more pleasant. Galla villagers reported plenty of Nyala and that no one else had shot in this neighbourhood.

During the first evening, spying above camp, I spotted three herds of cows, which looked promising. It is extraordinary what good cover even short heath gives while the animals are lying down. Moreover, there are countless ravines, large and small, and folds in the ground, which would hide an Elephant. However, from 3 p.m. to dark and early in the mornings the Nyala wander about grazing and are fairly easy to spot. But I seldom found even half-grown bulls with the herds.

Next day, leaving camp early with one local man and my gun-bearer I pushed high up the slopes, carrying lunch and prepared for the day. It was rather difficult and very tiring going, ascending slowly, tearing your way through heather, sometimes head-high, and switchbacking across ravines. We took it easy and rested to spy from each prominence. Two herds of cows had been seen, when, at 10 a.m., a single bull was marked about 600 yards away. He was standing in three-feet heather and looked very suspicious.

We crouched in the heather for some time to give him a chance to settle

down. The wind was right, and very soon he apparently lay down in a dense patch of heath, and only the tips of his horns were visible. But I had seen enough to know he was a real prize. Now I felt the lack of a good hunter. Two or three shallow ravines separated us, and the heath gave good cover for stalking, but it was not so simple. Leaving the two natives behind as useless, I easily reached the nearest rise about 250 yards from my quarry. Even there he was very difficult to pick out and only his horns were visible. He seemed to be lying—or standing—in very deep heath and to be watching me. For all the world it looked as if he could see me and was crouching and hiding, thinking himself unseen.

A shallow dip separated us, and it meant crossing a forward slope of burnt sparse heath to crawl nearer. For an hour I hovered. It was a question of waiting for him to show himself, of trying to creep closer in scanty cover, or of risking a shot. Through glasses I could see that he was a monster head, with very massive horns. His body was invisible, but I had a growing fear that he was on his toes, ready for instant flight. Now I lacked someone—anyone—to lay a restraining hand on me and breathe, "Wait." Anyway I aimed below the horns and fired. The horns disappeared. A pause. "Down and out," I prayed. One horn appeared, and I fired again at the bush. Another pause. "He's mine," and on the thought a huge dark-grey shape burst from cover and galloped off. I wasted three running shots and took up the spoor.

I still thought he was mine. We found and followed an ample blood spoor for five hours. Up to the highest pinnacle of Chelalo Mountain, down into a cup-like depression at the top, bare and desolate, full of crags and fungus grass and patches of giant lobelias. The blood spoor had ceased. The foot spoor still went on sound and strong. He had never lain down or been sighted. I reached camp dead beat after thirteen hours of it. Next day I sent up Gallas with dogs and the promise of a huge reward. The fourth day I took a pony and spent the day searching and watching for vultures. It was all in vain. Now I hope that he will live to give some other hunter such another hunt with a successful conclusion. What did he measure? For an hour I had watched those horns silhouetted above the heath. I know a 44-inch pair picked up by Gallas, and sentiment aside, I would vote for the lost monster. So, another of the "might have beens."

But Fate, relenting a little on the third day, gave me a good hunter and a herd surprised on a salt-pan in the heath country, and a fair bull of 36 inches.

Meantime, however, Blaine across the valley was having great sport. It was bleak, desolate heath country, with many rugged ravines, and much of it covered with dried heath tree-stumps, which is most irritating to cross.

He jumped a herd at least every day, mainly by learning exactly in what sort of place to look for them, and partly by spooring. Luckily on his side herds of cows were rare. His experience agrees with mine that Nyala will generally try to lie close and hide in the heather, until you are practically on top of them and then bolt like a rabbit. Most of his were running shots at close range. On one occasion he flushed a herd of four or five bulls, and bagged one which his men began to cut up with much shouting and noise. Shortly after Blaine was attracted by wild whistles

of his syce, lower down the ravine. He strolled down to him, actually saw a bull crouching in cover, went back for his rifle, returned and shot it. This was a bull of the same herd he had flushed. Next day he bagged a solitary bull, with a nicely shaped head of 37 inches.

Meantime, I had moved camp to Chelalo nek, within half a mile of the two little lakes. Blaine passed me here *en route* for a Bushbuck place on the north slopes. We had two days left before trekking for Modjo station. I had two chances left, Friday afternoon and Saturday morning. It hailed and rained in torrents on Friday, and although I went out it was hopeless, and one felt like a drowned rat in the long wet heather. Saturday morning broke, bleak and wet and cold and full of damp mist. My two hunters and I trailed out of camp, cold and down-hearted, while my syce dragged an unwilling pony in the rear. Striking south-west along the slopes of Chelalo west, we left the two lakes below us and fought our way through long wet heath.

A steep ravine checked us, and syce and pony were sent round on the top, while we plunged down. Suddenly came a shrill whistle and a yell from the invisible syce. We tore up the far slope and saw the syce waving forward, an unmistakable signal. We rushed ahead with our eyes wide open and "Gamaj," the new hunter, very much in the van. Suddenly he dropped, and crouching, rushed my gun-bearer, seized my rifle and led me on at a crouching double.

We spotted a solitary bull on the far side of a shallow ravine, 150 yards away in breast-high heath, quietly browsing. A feeble sun lit up well those fine horns and their white tips. It was a gift. A nice head of 37 inches, bagged inside the hour on the very last morning.

From the Arusi country we took train to the Hawash and finished up with a week's hunting in the low country. There is a fair railway hotel at Hawash, which can be made headquarters, and guides and pack animals—mules and camels—can be arranged locally.

But although I saw large numbers of Oryx Beisa, Soemmering's Gazelle, a few Swayne's Hartebeest and Dik Dik, and a rare Lesser Kudu and Gerenuk, this shoot is not to be recommended at this time of year, June. It was extremely hot and very dull country. Our guides and hunters were terrified of meeting hostile Dankalis and therefore never had their heart in their work and would not lead us to the best country, which was probably further afield.

We left Abyssinia on 15th June and embarked at Djibouti, which is the nearest port, connected by rail, to the southern shooting country.

Many people have asked me if Abyssinia is a good shooting country, and the answer is obviously, No. It is a land which happens to possess two unique and special varieties of game. One of these—the Mountain Nyala—is an easy, pleasant shoot in ideal country with enough hunting to make it good. The other, the Walia, is undeniably difficult. It is hard to get at, the animals are rare and local, and the country is a trifle grim. Much needless trekking might be avoided by hunting Semien from Asmara and back, or out via Gondar, Gallabat and the Sudan. In that case three months from Asmara should be time enough.

As to expense, about £50 each a month, should cover everything while trekking in Abyssinia. Beyond wages, stores and hire or purchase of pack and riding animals, there are but trifling outside expenses.

THE WESTERN LITTORAL OF THE RED SEA

(Continued)

CHAPTER FOUR

MOUNTAIN NYALA IN SOUTHERN ABYSSINIA

By H.R.H. THE DUKE OF GLOUCESTER

THE best way to the Arusi country is to take the train from Addis Ababa towards Djibouti and to alight at Modjo or Tedia Mariam, about half a day's journey, and there to meet your *hamla*.

Your baggage should have been sent out ahead on mules to meet you on the railway.

The Hawash River, rising in Lake Zwai, flows north-eastward, south of the railway, which it finally crosses at Hawash station in the low country and drains into the Danakil lowlands.

About seventy-five miles due south of Tedia Mariam by the caravan route there is a place called Ahia, 9000 feet altitude, and three days' march from the railway. Ahia is situated on the northern slopes of Mount Chelalo.

Between the Hawash River, fourteen miles south of Modjo, which one crosses *en route*, and Ahia, the track climbs some 5000 feet and crosses a plain very rich for agricultural purposes. As yet only barley and hay are grown. The steep part of the climb is during the last twenty-five miles, where one encounters deep gorges to be crossed, with dried-up river beds at the bottom, about twenty-five yards broad. (This was in mid-November.) The hillside, to begin with, is covered with grass, interspersed with rocks. As one climbs up to the 9000-foot contour so trees become more numerous. Above that the giant heather commences and many kinds of wild flowers exist, until, at the top of the mountain, one reaches the giant lobelias, which look like so many telegraph poles in the distance. The sun is very hot by day, and at night the temperature drops to nearly freezing point.

Early one morning two of us started out to look for the Mountain Nyala, accompanied by a good many natives, whom we tactfully left at various stages. Our own guide, dressed in his cleanest white *chamma*, showed us a herd of Kudu-like animals, which we followed. Owing to his excitability we were not able to get within less than five hundred yards of them, so did not worry them any more. At last he explained that they were not the right sized animals to go after, so, after much talk, we went farther up the hill.

We had not gone far (by this time the party had dwindled down to six, as the lowland Abyssinians do not like climbing!) before the guide got very much excited and pointed out a lone bull about four hundred yards away at the top of a ridge. It was only through our throwing the guide to the ground that the animal did not see him. Two of us went after the bull. Walking uphill at that height was most difficult until one got used to it. One progressed very slowly and got out of breath quickly. By the



ABYSSINIA

Plate 60

MOUNTAIN BUSHBUCK OR NYALA SHOT BY H.R.H. THE DUKE OF GLOUCESTER, BY
WHOSE KIND PERMISSION THE PHOTOGRAPH IS REPRODUCED.

time we reached the top of the ridge on which we had last seen him he was on top of the next, about six hundred yards away. It seemed hours before we got on the top of that ridge, to find him just beyond a deep (but dried up) watercourse. If he had seen us then he would have gone over the whole mountain, as there was no more cover. We moved on again and got some big rocks between him and us. Suddenly he turned into the watercourse and looked as if he would follow it up over a pass between two peaks.

I then started to climb the peak on our right, which was the most tiring thing I had ever attempted to do. Luckily my companion was not so impatient as I was, and I turned round to look for him and saw him a little below me using his glasses. I looked in the direction in which he was looking and saw the animal grazing in the open on the opposite face of the watercourse. Fortunately I did not have very far to go downhill before I got a large rock between him and me. I had just begun to stalk him, having left the large rock, which was as big as a bungalow on the seaside, when a thick mist came down. I got to a small rock and waited. At last the mist cleared, and, as the animal was nearly broadside on, I fired and hit him. Immediately afterwards the mist came down again for about a minute. I then saw him lying down on my side of the watercourse, about eighty yards away.

He was the only bull I saw all the time I was out there, although two other big ones were seen by others in the party.

Editor's Note.—This was a very fine bull of 40½ inches. There are several noteworthy points. A shooting camp in Abyssinia is always the gathering point of a crowd of Habishes, plus one's unwelcome escort. A number of these men always insist on accompanying the shooting party and can only be shaken off by hard climbing. Even the so-called hunters dress in white *chammas*, the best possible danger signal to game, and, on sighting a good quarry, go completely mad with excitement.

The mists in November seem to be as troublesome out stalking as they are in May and June, while the climate is equally tricky, with a burning hot sun by day and almost freezing nights.

Chelalo Mountain, possibly thirty miles in circumference, which was found by Blaine and Maydon to be one of the best haunts of Mountain Nyala in the district in 1924, still remains so, and the northern end of the hill group appears to be as good as the south-eastern end, near Albasso, was previously.

The experience of both parties emphasizes the fact that Mountain Nyala may be expected in the burnt-up and dry tree-heath zone, above the forest line and below the bare tops. Care must be taken, therefore, to avoid driving the quarry out of the tree-heath cover on to the barren heights during the stalk.

As giant lobelias are seldom found at a lower altitude than 14,000 feet, the burnt tree-heath zone must be close on 12,000 feet, and it is very difficult to breathe freely if exerting oneself.

The experience of both parties seems to prove that Mountain Nyala are in the habit of moving slowly along through the tree-heath, browsing and watching for danger, and are, perhaps, not so wary, as difficult to come up with, before they reach bare, coverless country or disappear out of sight.

PART SIX

SOMALILAND

CHAPTER ONE

GENERAL

By MAJOR H. C. MAYDON

SOMALILAND as a shooting ground at the present day has much in its favour from two points of view. First, for the specialist who wishes to collect specimens of two little-known beasts, not to be found elsewhere. The Dibatag (Clarke's Gazelle), and the Beira Antelope. Secondly, for the beginner, who wishes to gain his experience as cheaply and as easily as possible. For him there are twelve specimens of game—Greater and Lesser Kudu, Oryx Beisa, Soemmering's Gazelle, Swayne's Hartebeest, Speke's and Pelzeln's Gazelles, Gerenuk, Dik Dik, Klipspringer, besides Dibatag and Beira. There is also a fair chance of Lion, Leopard and Cheetah.

All of these, except the felines, which must be a question of luck, should be obtained with comparative ease in a two to three months' shoot from Berbera. Not too bad a bag for a beginner's shoot, with at least three fine trophies, the two Kudus and Oryx Beisa, and two rarities included.

But the best of all is that all this may be achieved simply, and by the sportsman's own individual effort, without the help of white hunters and their ilk. Thus and only thus will the young shikari learn the ropes for the future.

Moreover, from my experience, I found British Somaliland the cheapest district in which to shoot in Africa. A £20 licence or Rs. 50 for the local garrisons and the Fleet. Good trek servants who know their job, at about £2, 10s. a month. Good baggage camels at R. 1 per working day or 3 annas per day when not working. Fair shikaris who can do all that is needful, spy and track game well and skin trophies passably, and who, when proven, should be kept permanently at about R. 1 per day. Servants and shikaris talk English without, in rare cases, being spoilt thereby.

It is a country which lends itself to two friends hunting together.

Two camels should be devoted to carrying water tanks, which, by courtesy, can be borrowed and arranged at Berbera. Twelve five-gallon drums will supply a party of nine men with sufficient water for four days comfortably, and will thus give freedom of action in an arid land.

Stores, if convenient, should be taken from England, except commodities such as flour, rice, sugar, potatoes and onions. But for those less particular, most stores are obtainable at Berbera or Aden. The usual average of £5 per month per person will cover stores. Allow a tin of milk a day and carry plenty of tinned vegetables.

Four baggage camels should suffice to carry the stores and equipment of each person, up to two months.

Seats on the frequent motor buses on the Burao and Hargeisa roads from Berbera can be taken to avoid the first twenty-five miles' dull march out.

At a rough estimate allow £15 to £20 per month for your shoot, outside licence, stores and passages to and from Berbera.

The best season, for climatic reasons, seems to be from 1st December to 1st April. The country will be very parched and waterless in February and March until the rains break, but this need not affect the sport. It is not, at this period, too hot for comfort, and the nights are cool.

As first impressions are apt to be the same for all newcomers, here are a few.

All the British residents are out to help and welcome the visiting sportsman. I like the natives, both the wild men and the more sophisticated. There are rest-houses at all the big centres which are also linked by passable motor roads.

Berbera lies on the usual flat coastal belt, hemmed in by a treeless, desolate plain of low thorn scrub, sand, and loose stony shale. Ten miles inland rises the first jagged barrier of low, arid hills. Beyond, a higher plateau, scored by sandy tugs (nullahs), lined with trees, slopes gently upward towards the second hilly barrier, dividing the highlands from the plains of the Guban. On the top lies Sheik, close on 5000 feet. The air is purer with a strong north wind, but it is still an arid land of thin scrub, with few good camping grounds under shady trees.

Thence southward towards Burao and Aik the ground slopes imperceptibly lower, the distant hilltops fade away, and are lost on the north horizon and it seems that a monotonous plain stretches on and on to the heart of Africa.

Very little game is seen on the march, and one of the peculiarities of British Somaliland is how local some of the game species are.

Another peculiarity is how little cultivation is done by the native, who is said to live on the milk of his goats, and then their flesh, and then by the will of Allah.

Yet another is that though pack camels are common, riding camels are an extreme rarity, and my friend and I were lucky to procure two for part of our trip which, though not "good hacks," gave us a welcome change on our long march.

British Somaliland strikes me as being an easy shoot in every way. It is too small a country to offer much variety. Here are no mountains, deserts, forests or great rivers. It is a quiet backwater before the great Habishe Mountains plunge into tropical Africa or the pitiless wastes above the Tana River.

HABITAT OF GAME OF BRITISH SOMALILAND

I have mentioned the twelve species of game common to Somaliland. I have also noted that the habitat of many of the species is very local. Since Blaine and I went out to collect specimens of three varieties only, namely Beira, Dibatag and Lesser Kudu, it is of their haunts only that I can speak authoritatively, and then there are possibly better places that we did not visit.

Moreover, the route chosen would depend on whether the shooter were out for the so-called rarities only, or for a general bag.

We found that two good places for Beira were: (1) the small detached hills eight miles south of Sheik, not far from the wells at Dubba, and on both sides of the Sheik-Burao road; (2) the long, flat-topped hills immediately west of and above Lafarug on the Berbera-Hargeisa road, thirty miles from Berbera.

Beira are queer little puce-coloured beasts, rather resembling a Steinbuck or a Klipspringer. They are generally seen in pairs or threes on bare, stony hillsides. They often lie up in the heat of the day under a patch of shady thornbush in a small nullah. We never found more than one herd on one small hill, which took perhaps three hours to explore. Although very alert, they were not very wild, and tried to keep to their original hill even when disturbed. They were constantly on the move, save when they settled down for the midday siesta. Thus they were hard to approach, since they were always trickling away amid small bush and rocks, or else intensely hard to spot in shadow. They were the hardest animal I have yet met to keep in view, and always seemed to fade away from sight like the smile of the Cheshire cat, partly owing to the coloration and partly to their constant movement in and out of cover. When they stood motionless, even in the open, they were harder to see than ever, due to light and shade. The horns of the males, about four inches long, are very difficult to distinguish, even with field glasses.

They are often found quite close to a herd of sheep and the attendant shepherds.

Water tanks will be necessary in camp, as water has to be brought from Sheik or Dubba.

Other game to be seen near by is Speke's Gazelle and Dik Dik.

A good place for Dibtag is in the Khansa thornbush forest, twenty-five miles south of Burao, to the east of the Aik road. The district is called Bali Shala Shala. A competent guide would be necessary, as their haunts are so very local. They are also reported south of Aik, and towards Bohotle.

At Bali Shala Shala their best haunt would have been contained in a five-mile circle. To the south the thorn bush was too dense; north and east it was too thin and full of camels.

They can best be seen in the more open jungle at the edge of the denser thorn bush forest. They are by no means rare and would possibly be seen three or four times in a morning hunt. They are generally in twos or threes up to herds of five. I never saw more than one mature male in a herd.

They are also queer beasts, slightly bigger than a goat, puce coloured, long in the neck and the legs, and with the peculiarity that, when alarmed into a trot, they raise their fifteen-inches-long tail stiff and erect up in the air.

The best horns, $11\frac{1}{2}$ to $12\frac{1}{2}$ inches, are those which have a distinct forward curve as against the straighter, smaller ones, and can therefore be best seen from a side view.

Even when alarmed into a trot or gallop retreat, Dibtag do not seem to go far, and can be cautiously spooed up in the soft, sandy soil. They generally make for the denser bush, and are apt then to be jumped in impossibly thick cover. To ensure a good head it generally means picking up the herd three times. Once at, say, three hundred yards, to make

sure there is a male with them. Then to approach near enough to see if his horns are good. Thirdly, for your shot. They are so alert and so constantly on the move amid scattered bush, that it is seldom possible to eliminate one of these successive steps.

Gerenuk were also fairly common in this area. Herds of both specimens were apt to commingle.

Lesser Kudu are, of course, neither a rarity nor indigenous to British Somaliland. But it is one of the best and most central localities for them. As they are a fine trophy and an equally sporting quarry they deserve special mention.

We went to Mandere district for them, forty miles from Berbera, on the Hargeisa road. But from information received it seems that the jungle a few miles short of Hargeisa would be better. There must be many haunts of Lesser Kudu, and the less well known one's shooting ground the better the chance of a good head.

Lesser Kudu are not found on the hills which enclose Mandere, and cleave only to the dense bush which fringes the several broad, sandy tugs which intersect the valley plain. Their favourite food is the "pineapple" aloe (Da-ar), and low seisal bushes (Hig), and they are never far from such. The bush is very thick and dense, varying from shoulder-high thorn to eight to ten feet high, dense, green-leaved or creeper-clad trees (Addei and Armo). At this season, March, bulls were not necessarily with the cows, and the herd nearly always split into individuals when disturbed. Bulls were more common than cows, and there was a fair proportion of shootable bulls. At the beginning, different bulls were often seen three times in a morning's hunt. From our experience, bulls are very soon disturbed out of each hunting zone. If one cannot make one's selection and shoot within the first three days from one camp, one's chances are daily minimized. Spooring up was employed all the time, and spotting from trees and ant-hills was useful.

Generally the beast was first seen staring at one a hundred and fifty yards away, with only head and neck visible above the thorn bush. Field glasses can be used, but the time wasted generally loses one all chance of a shot. Until the jungle is disturbed, and the quarry restive, they can often be spooled up again for another chance.

Having missed our first opportunities by being too cautious, we had much difficulty in bagging fair heads at all, and a fortnight's hunting was barely enough. Yet always remained the feeling that you might walk out of camp one day and by sheer luck bag a good head within a hundred yards.

Gerenuk and Dik Dik were fairly common, and Lions' spoor was seen.

Greater Kudu and Lion are to be found on Gan Libah hill, the highest peak above Mandere. Also all along the hilly barrier which runs east and west.

Swayne's Hartebeest between Hargeisa and Jig Jiga on the Abyssinian frontier.

Oryx Beisa in many localities. Near the coast, fifty miles north of Berbera and near Hargeisa and up towards Zeila.

Aoul, or Soemmering's Gazelle, near Hargeisa and probably on the fringe of the Oryx country.

Klipspringer between lower and upper Sheik.

SOMALILAND (Continued)

CHAPTER TWO

NORTHERN SOMALILAND

By COLONEL H. G. C. SWAYNE

IF you travel a hundred and fifty miles south, across the gulf, from Aden, you will reach the Somali Coast, acquired by Britain in 1884.

It includes Karam, Berbera (the seat of administration), Bulhar, and Zeyla. Inland is the "Mullah" village of Hargeisa.

Between 1887 and 1898 the unknown interior became an explorers' paradise. The first caravan from Berbera was that of Messrs. F. L. James and Lort Phillips, in 1884, to the Webbe Shabeyli, or Leopard River. Also, in the first years of consolidating our position in a new and unknown part of Africa, police blockhouses had to be made, and the country had to be surveyed for the Government of India, Political Department, on which various works I was employed for some years. Then from 1898 to 1919, operations against the enemy of our coast tribes, the "Mad Mullah," had to be undertaken, the first campaigns being organized, and led to success, by my brother, with the help of raw Somali levies. These campaigns, and the gradual absorption of the wilds of Ogaden by Italy and Ethiopia, have greatly limited the opportunities for exploration and sport.

On the map, as you look south, if you imagine your back turned to Aden, you first see in front of you the arid maritime plain, narrow at Karam and wide at Zeyla. Beyond this, low sterile maritime mountain ranges, and beyond these, hills again, interior plains still sloping upwards, till you come to the foot of the great steppe of Golis, rising abruptly to the watershed of the country at 5000 to 7000 feet, within 35 miles of Berbera. Then from the watershed the country slopes gradually down to the Webbe Shabeyli about 400 miles inland. The ridge of the watershed, roughly 100 to 200 miles long from east to west, stretches from Wagar behind Karam in the east, through Golis range, to the wild Hargeisa hills and on to the Gadabursi hills and the Ethiopian Border, 100 miles south of Zeyla. The rim-rock, along the cedar-crowned bluffs of Wagar, Daar Ass, and Gan Libah (Lion Hand), are a striking feature dominating the low coast country, which itself is called Guban. The high country, Ogo, south of the watershed, merges into the forested glades of the waterless Haud, to cross which water must be carried for 100 miles on camels at its narrowest part, though surface seasonal rains are sometimes good. Also there are, here and there, great open plains called "Ban," with good grass, but no wells or bushes.

The Webbe Shabeyli empties itself into marshes behind the Italian coast of East Africa.



Plates 61—63

SOMALI GAME

Top. A GOOD MANED LION. A VERY DIFFICULT BEAST TO PHOTOGRAPH, DEAD OR ALIVE.

Centre. LESSER KUDU. A BUSH LOVING ANIMAL, CHIEFLY FOUND IN SOMALILAND AND KENYA.

Bottom. KUDU. FOUND ALL OVER AFRICA, BUT HEADS SELDOM SEEN MUCH OVER 50" NORTH OF RHODESIA.

1000

The wilder Somali tribes south of the Juba River, which is beyond the Webbe Shabeyli, belong to the Northern Frontier of Kenya Colony.

Seasons in North Somaliland are: (1) *Jilal*.—January to April: dry, with great heat on coast. (2) *Gu*.—May, June: the heavier rains, light near the coast. (3) *Haga*.—July, August, September: very hot, with the Kharif wind, or south-west monsoon, blowing furiously; sandstorms in Guban, but cool in the high interior. (4) *Dair*.—October, November, December: the winter light rains, chiefly falling at the coast ranges.

For shooting I recommend May to September inclusive, the high interior being more often green.

Since the "Mad Mullah" was finally disposed of and died in 1919, Aden has mainly come under the Royal Air Force, and officers stationed there, who can now reach most parts of Northern Somaliland in a few hours, they or the officials at Berbera, would probably be the most reliable authorities on the shooting licences, reserved forests, and localities of the game.

Applications should be made to the Secretary to the Government, Berbera.

S P E C I E S O F G A M E

ELEPHANT, Somali Name "MARODI."—Are practically extinct in British Somaliland, but might now be found at the headwaters of the Webbe Ganana (Juba); or the Webbe Shabeyli; or in the Eastern Ethiopian Hills; and their habitat would be most easily reached by using the Jibuti Railway to Harar, then starting from there with Ethiopian permission. Mounted natives are useful as scouts for locating any herds, but it is noteworthy that Somali Elephants do not generally carry fine tusks.

BLACK RHINOCEROS (*Bicornis*), Somali Name "WYIL."—Almost extinct. Formerly penetrated north to Toyo Plains in Ogo. Probably still found in Ogaden.

GREATER KUDU (*S. s. chora*), Somali Name "GODIR."—Somali Kudu horns do not generally run longer than 50 inches round the curve. Found in stony hills near bush and water. They are common on Wagar and on Gan Libah in the Golis, and in Libahleh Range, south of Zeyla, but not usually in Haud or Ogaden. Under the rim precipices of Hegebo Plateau, west of Berbera, there were large Kudu, with short horns, which may have been young specimens or perhaps akin to Mountain Nyala.

LESSER KUDU (*S. imberbis*), Somali Name "ARREH GODIR."—This beautiful Antelope likes bushy, flat, well-watered valley bottoms. The finest horns, about 28 inches straight, were obtainable near Mandere, under the northern face of Golis Range, but the jungle north of Hargeisa now seems to be better. On the Webbe flats, far inland, Lesser Kudu have smaller horns and long hoofs like these of ordinary Nyala. Yet the record head was shot high up the Webbe, beyond Harar, in Abyssinia.

HARTEBEEST (*B. swaynei*), Somali Name "SIG."—Formerly found in open "Ban" Plains of high Ogo in great herds, especially on the Marar Prairie, near the Ethiopian Border.

ORYX (*O. beisa*), Somali Name "BEIT."—Very wary; found in open bush. Horns about 34 inches for bulls, 2 inches longer for cows. Plentiful in Ogo and Ogaden in small herds. Frequents Bulhar Plain and Jebel

Elmas. Cows said to attack Lions in defence of calves, a possible origin for Unicorn legend.

WATER BUCK (*K. ellipsiprymnus*), Somali Name "BALANKA."—Only found in small families on Webbe flats far south. Horns about 24 inches. Flesh too rank for Somalis.

BUSHBUCK (*Tragelaphus scriptus*), Somali Name "DOL."—Size of a small fallow Deer. Only found in thick woods on banks of Webbe. Natives catch them in pits. Record horns about 17 inches.

THE GAZELLES

WALLER'S (*Lithocranius walleri*), Somali Name "GERENUK."—Slender, with Giraffe-like neck and long lips, and short, well-ringed, thick horns. Common and ubiquitous in light bush. Sometimes seen on hindlegs, forelegs against tree, browsing on leaves.

CLARKE'S GAZELLE (*Ammodorcas clarkei*), Somali Name "DIBATAG."—Resembles an immature Gerenuk. Rare. Frequents flat bush prairie of Dalbahanta country, south of Burao. The horns are like those of a Reedbuck, and when alarmed, this Gazelle erects a long stiff tail over its back.

SOEMMERING'S GAZELLE (*G. s. berberana*), Somali Name "AOUL."—Very common in Ogo and Ogaden, on open plains. Horns lyrate about 14 inches. Common on Bulhar Plain.

LOWLAND GAZELLE (*G. pelzelni*), Somali Name "DERO."—Found anywhere on the low country on open, pebbly ground.

PLATEAU GAZELLE (*G. spekei*), Somali Name "DERO."—Similar to the Lowland Gazelle but ranges the high country. The skin over nose is wrinkled.

DWARF ANTELOPE: Klipspringer (*O. oreatragus*), Somali Name "ALAKUD."—Rare: found among boulders west of Zeyla—Gildessa caravan track. Also below Sheik. Size of a small lamb, with bristly grey-brown hair.

BEIRA (*Dorcotragus melanotis*), Somali Name "BEIRA."—A reddish Antelope of same size, seen in hills behind Karam and Sheik, but rare.

DIK DIK (*Madoqua swaynei*), *Madoqua phillipsi*, Somali Name "SAKARO": (*Madoqua piacentinii*), (*Madoqua rhynchotragus gwentheri*), Somali Name "SAKARO GUSSULI."—The three *Madoquas* are the size of a hare, with similar habits, and live in low undergrowth near water. Horns 2½ inches. Crest of long hair on forehead. *Gwentheri* is larger, and has a long, puffy snout.

Unfortunately a great trade has sprung up in Italy in the pelts of these beautiful little animals. Dik Dik skins are exposed in the shop windows of every town in the Italian Riviera, and the trade may lead to their disappearance from the whole of Africa eventually.

MISCELLANEOUS GAME

BUFFALO, Webbe Name "JAMUS."—Not really a Somali animal. Is probably of the Sudan variety. Sometimes strays from Gallaland to the bush of right bank of Webbe for water.

GIRAFFE (*G. reticulata*), Somali Name "HALGIRI."—A beautifully



Plates 64—66

SOMALI GAME

Top. BEIRA ANTELOPE. FOUND IN THE SMALL STONY HILLS OF SOMALILAND. OWING TO HIS PARTICULAR PUCE COLOUR, ONE OF THE HARDEST LITTLE BEASTS TO SPOT.

Centre. DIBATAG. RARE AND LOCAL IN CENTRAL SOMALILAND (THE HAUD) NOTE HIS PECULIAR LONG TAIL, HELD ERECT WHEN ALARMED.

Bottom. GERENUK. ONE OF THE GREATEST OF THE GAZELLES, FOUND IN SOMALILAND AND KENYA.

netted variety, said to be found in the Aulihan country, down the Webbe, below Karanleh.

ZEBRA (*E. grevii*), Somali Name "FERO."—Found in the Southern Ogaden, and in Ethiopia.

WILD ASS (*E. a. somalicus*), Somali Name "GUMBURI."—Slight stripes on legs. Found on Hegebo Plateau and Golis Range. Loves stony ground.

OSTRICHES, Somali Name "GOREYU."—Rare and wary, owing to the Somali method of hunting, posting relays of horses on their probable line of retreat, and riding them to exhaustion.

SMALL GAME.—Bustards (Greater and Lesser), three kinds of Guinea-fowl according to locality, two varieties of Francolin, and Sand Grouse near the coast.

CARNIVORA

LION, LEOPARDS, SPOTTED HYENA (*Waraba*), **STRIPED HYENA** (*Didar*).

It is a matter of common knowledge that these animals follow either the people, flocks, and herds, or the game. After the annual rains there is a migration of man and beast in search of fresh grass and water. There, where the living meat goes, the predatory animals follow.

Discussing the meaner game first, Hyenas are not averse from stealing an old boot from the tent or a leg of mutton from the cook; they are cowardly by day, but are sometimes shot from the flap of the tent by firelight. The big spotted kind is a terror by night to lonely sleepers in the open, snatching a mouthful with their terrible jaws from a human face, a cow's udder, camel's tail, or pony's flank; or killing a lost child or aged person wandering at night. The striped kind is rarer, less bold, living among game.

Leopards retire by dawn to their lairs among boulders and caves, or dense thickets. They also lie concealed along branches, above camp, dropping at night on to the back of a goat, by the cook's fire.

Lion.—The Somali hunting grounds were famed for Lions in the early days, and contain plenty still so long as tribes and stock exist there. For hunting both Lion and Leopard it is best to encamp near a kraal, disregarding dust and noise, and to wait for news of depredations. The sandy ground helps you to track, circling patches of bush, high grass, or reeds. Somalis, in common with most camel-boys or cowboys, black or white, are, by their occupation, excellent trackers.

Man-eaters, in Ogaden, and elsewhere, take a heavy toll. Once, in early morning, I surprised some people lowering a young woman's body into an open grave, three yards from the hut from which she had been clawed by a pair of Lions two hours before. A month later, I found these kraals deserted, and that day my head camel-man was killed by a Lioness while galloping through the jungle at noon. A few days after this tragedy, we ran into the tribes again, and we found that six people had been killed in the time between the two tragedies, making eight in a month killed by this one pair of Lions. In the Marar Prairie, which is fifty miles across without any bushes, in the 'nineties it was possible by using horsemen, and watching the edge of the bush country at dawn, to mark down any Lions returning from night raids on the Hartebeest herds of the open, to cut them off, ring them in, and ride them down. Mounted scouts of a

tribe once so cornered for us two Lions and a Lioness, and the Lioness, which had been wounded by my brother, charged, and knocked me down, giving me eight fang wounds in the right shoulder. As I lay insensible, my brother killed her over me; and after attending to my wounds, he, with the help of the four mounted Somali, who ringed in and watched the other two Lions, was able to ride down and kill the biggest, a fine black-mane.

The Lion's charge is fast enough to catch a slow pony, but when chased in the open for a long distance, it can, cat-like, be brought to a standstill.

At night, Lions promenaded the game trails, throwing their voices about, probably trying to drive game to themselves, or to a confederate Lioness.

One night, when belated, many miles from camp, and sheltering with two natives in the top of a flat mimosa, with a donkey which we had been leading tied below, we heard a Lion pass us, apparently going northwards along a sandy game path lying to the west of us, and about three-quarters of a mile away. He was grunting and roaring as he jogged along, but did not come near us. At sunrise, to our surprise, we found his tracks about the same distance away, going north, along another path to the east of us. But there was no sign on the western path from which the sounds had seemed to come.

Good places used to be Biji, west of Bulhar; Golis Range, Waridad Plain, south-east of Berbera; Aware Pan, near Milmil in the Haud; and all Ogaden.

The Lions from high country grow the best manes. They often hunt in large families.

Once, among reeds of the Issutugan stream, towards dusk, when walking quite alone, I found the tracks of eleven Lions, some being half-grown cubs; the water was still oozing into the pug-marks.

On another occasion, I was camped about 150 miles from the north-east coast, next to the camp of another white man, with whom I had forgathered. We heard of a troop of about eight Lions, which were haunting the game trails. There was a little native girl who used to wander round our camp by day, looking for scraps for some kraal near. One night, two or three Lions left their spoor in the sand close to the tracks of the girl, left the day before. So I shot a Hyena, and purposely left the carcass out; and the following day at eleven, a native called me to say that something was there. I hurried over, and crept up to a bush overlooking the position of the dead Hyena, and there was the head of a Lioness pressed down, calmly regarding me from the grass. In a moment she had whipped round and raced away, the hurried shot I sent after her missing.

Next day, when after other game, and rather bored with Lions, I saw a Lioness, probably the same one, strolling along some 200 yards away in low Karoo scrub, the bushes being about three feet high, with some isolated thickets which were higher. I sat down promptly on the sand, elbows on knees, and let drive; then threw myself flat, not daring to raise my head, as I had heard the loud tell of the bullet on her hide, and I did not want her to see and charge me.

Just then, I spied my white friend from the camping ground, coming up, and beckoned to him, saying that I had just hit a Lioness, and would he help me to get her, as I knew that he wanted one badly.

We took up the spoor with our two natives, and reached some thickets

near where the Lioness had been, and my Somali was examining some blood spots outside the low overhanging brush of one of them, when the other native pointed a spear, and beckoned. My friend tiptoed to his side, and after a long look into the dark shadows, he pointed his rifle, while I covered him from six yards away. He had seen the Lioness crouching in the deep shade, with her back towards him, evidently breathing^{ly} heavily, and too ill to have seen or heard us yet. He fired, and the two natives dragged out the body of a fine old Lioness.

My friend stopped, with his native, to get off the skin and take it to camp, reserving the skull for me. The day being still young, I walked on for another mile or two with my Somali. Soon I stood on an open ground rise overlooking a shallow dry waterpan, with a big fig tree growing in its centre. Under the fig tree, twenty feet below me, I could make out in the shadows of undergrowth a little crowd of recumbent figures, just like natives having a midday siesta. They had begun to move their heads about, and not quite knowing what they might be, I rested my left foot on a little ant-hill, elbow on my knees, and cocked both barrels of my rifle ready for emergencies.

There was a stirring up of the dark crowd in the shadows, and out burst, not humans, but five full-grown male Lions, scattering like a bursting shell, each leaping in his own selected line up to the rim of the pan, making for the cover of a great three-mile thicket beyond.

At my little ant-hill I was plainly visible in the open. One Lion, the last, was climbing over the river, eighty yards from me, when I let him have it in the left shoulder. He whirled, and in half a dozen springs and rolls was down under the fig tree again, where he took a final somersault. I still held my foot on the ant-hill, and pumped lead at the struggling, growling beast. He kept on twisting, and trying to focus me with a view to charging, but I kept him occupied with bullet after bullet till he lay still. Then silence fell, and, looking through my field glasses, I satisfied myself that he was dead.

I do not remember how many times I had reloaded the double-barrel during those few tense moments. But on counting my cartridges, I found nine missing. Also, the left barrel had a shell stuck immovably, and obviously I could not follow the other four Lions until it had been forced out. My Somali and I spent some hurried minutes cutting and fitting a ramrod from the bushes which would go down the barrel from the muzzle, and by the time the jam had been put right the other Lions had reached the extensive forest, and had escaped.

A day or two later, as evening was coming on, after a long hunt after other game, I saw in the far distance a Lion and two Lionesses slinking away, and with my glasses could see that they had got our scent down wind, so, as it was late, I let them go.

So the report of a family of eight Lions had been correct.

SOMALILAND (Continued)

CHAPTER THREE

SPOORING LIONS

By NORMAN B. SMITH

ONE morning, shortly after leaving camp, accompanied by two native gun-bearers and mounted on a pony, I sighted a Lion and two Lionesses in the open, a short distance ahead and making for a line of forest. I started after them full gallop, but I rode a line some 50 yards to one side, and passing them, did not hesitate to ride right across their line of retreat, shouting at them, which caused them to pull up. Waiting till my two boys came up carrying my two rifles, a .577/.500 black powder Express, and a 10-bore Paradox. I then dismounted, and putting one boy on the pony I walked in to about 80 yards of the Lions, and with my first shot with the .500 completely disabled the Lion; but the second shot at the larger of the two Lionesses was a poor shot, just grazing the skin over her withers. She at once galloped off, and I shouted to my mounted boy to go after her and round her up. The smaller Lioness, only about three parts grown, stayed to see it out, but an express bullet between the eyes as she pluckily faced us at 50 yards killed her instantly.

I now had a hard run on foot, carrying the .500, in pursuit of the big Lioness, which my boy on the pony had rounded up half a mile further on. She was now thoroughly angry, and made several short rushes after the pony as the boy circled round her at a canter. I walked towards her, followed by the boy with the Paradox, who was a Somali gun-bearer hard to equal. She now turned her attention to us, and as she looked inclined to charge at any moment, I sat down at about 70 yards and knocked her down with a shot on the shoulder. She was soon on her feet again, growling loudly, with her head low and her tail out straight. My gun-bearer, Geli, suggested the imminence of a charge and the necessity of a good second barrel, for I had not time to extract the empty shell. Sighting with extreme care I got her just about the collar bone and killed her instantly. She was a good Lioness, just eight feet long as she lay. Geli was a treasure, no corner too tight for him, and as steady as a field retriever.

I had on this and a previous long trip in Somaliland killed a number of Lions by good long spooring work, not to mention many hard days spooring others, which had never vouchsafed a shot; and when I reflected on the ease and rapidity with which these three had been secured, thanks to the pony, I came to the conclusion that the method rather cheapened the value of a Lion as a trophy so got, compared with the hard work in spooring them. At the same time, as I entirely discarded the pony as a means of escape in case of trouble, the affair was sporting enough.

I may as well remark here that I do not believe in small bores for dangerous game, although anything from an Elephant downwards can be killed with even a .256 Mannlicher, provided you can get into position for an anatomically deadly shot, such as the temple shot with Elephant. However, as this is not always available, I think it wiser to use an adequate weapon with which there is a good chance of disabling the animal from various angles, thus reducing the likelihood of accidents while adding to one's confidence, the most valuable asset of all, in hunting dangerous game.

I found the black powder .500 Magnum Express with 440 grains hollow bullet very deadly with Lion, and have never used more than three cartridges to kill a Lion.

I believe in using a powerful rifle and going in pretty close, 40 to 75 yards for Lion, if you can get so near.

During my first trip in Somaliland, many years ago, while camped in the Ogaden country, I was sitting in camp one hot afternoon about 4 p.m. when a native arrived, and told us that a Lion had just killed a cow near his village only a few miles away. Now it happened I was reading Baker's book, in which he strongly recommended the solid lead Express bullet for Lion in preference to the hollow point, for which, provided that it has a heavy lead base and small cavity, I have a great preference. This, I think, cost me this Lion, for by way of experiment I, on this occasion, for the first and last time, took solid bullets with me. Reaching the village just before sunset with the native and one camel-man with me, my gun-bearers both being down with fever, we took up the easy spoor of the cow, dragged by the Lion for some distance into some very dense and dark jungle, and soon came upon the body of the cow, but little eaten, in a very dark place. As I stood thinking what was best to be done, the stupid camel-man suddenly shouted, "Shoot, sahib, shoot." At the same moment I saw the Lion vanish round the corner of a thicket ten yards away. Dashing after him I got in a snap shot as he disappeared, and the answering growl indicated a hit. The solid bullet must have gone right through him, for we saw where it had barked a tree just beyond.

From the nature of the blood spoor he was probably shot through the stomach, when an expanding bullet would assuredly have meant death in a short time. The camel-man now explained that, as we were looking at the body of the cow, he had seen the Lion appear round the corner of the bush, and stare at us, barely ten yards away. What cruel luck! Had my excellent gun-bearer been with me he would merely have touched me and pointed without a word, and that would have meant another good Lion in the bag. I was furious. The sun had now dipped, and the light was getting bad, but I at once took up the liberal blood spoor through very thick bush, till it led into some grass at least five feet high, and in places over my head. On my proposing to go through this the native declined to go further, and my fool of a camel-man protested that we were sure to be killed. However, I was so annoyed over this fiasco that I told him that I was going in, and he had got to come with me, adding that it would serve him right if he were killed, as it was his fault that we were not then occupied in skinning the Lion. For about fifteen minutes, as long as it was light enough to see the blood spoor, we followed it through acres of this grass, at times over our heads, till it got so dark I had to come out. I

must admit that I was glad to be outside again safe, for the tension was very great.

Next morning we came back again and found a fair amount of blood where the Lion had rested during the night. We followed the spoor till we lost it in rocky ground, the blood traces having ceased. With one of my hollow-pointed bullets we should have found him dead in the morning.

On another occasion, on the same trip, my companion and I, in the grey of dawn, took up the spoor of a fine Lion that had been roaring during the night not far away. It was very bushy country, with patches of soft sand in between, and after two hours' tracking we were evidently close to him. My pal and his two gun-bearers were about fifty yards away from me when the Lion suddenly walked out right between us, a big fellow with a fine mane; but the shot was too dangerous with the others right in line, and the Lion whipped round at once right past my friend, who made a bad shot and only sent the bullet through his thigh without touching the bone. The Lion dashed through the thick scrub in front of me, and I sprinted as hard as I could after him through thorny bush which tore my coat and shirt, till I ran into him in thick bush. He pulled up, roaring very savagely, and I shot him between the eyes at a distance of twenty feet. Why he did not charge I can't imagine, but he had only a second to make up his mind, for I shot very quickly; probably he was a bit nonplussed by the impetuosity of my pursuit.

I always prefer to hunt alone during the day, but when news comes of Lion, when we are both in camp, we always go for him in company. On the same trip another blood-spoor episode occurred, again without a charge. My friend on that trip was a very poor shot, but always ready to follow up with me in any sort of ground. A camel had been killed at a village where we made our midday halt, and we found the natives much excited over their loss, which had occurred an hour before our arrival.

It was bushy and grassy country with soft soil, good for spooring, and in about half an hour we had marked the Lioness down in a big patch of bush, sixty yards away, and a rather hasty shot with the .500 just failed, getting her through the neck, but not breaking the vertebræ. She broke away the other side and ran close by one of our boys, who said she was streaming with blood from the neck. We tracked her into a big patch of forty acres of high grass surrounded by bush. We held a council of war as to the advisability of following the blood-spoor into grass, when you might almost tread on her before you saw her. However, I was all for going in, and my friend, as usual, was ready to accompany me. It was not so bad as it looked, for, as I pointed out to him, with our two gun-bearers apiece there were six of us, so it was five to one against any individual being the sufferer, and plenty of assistance at hand. We walked that grass out for half an hour, the Lioness always moving on, invisible, in front of us. Finally we lost her. We had to march on in the afternoon, and I told the natives to make a good search for her and to skin her carefully if they found her dead. On our return that way we heard that they had found her dead two days later, but too messed by vultures to be worth skinning.

The best sport that I ever had in Lion spooring occurred in my second Somali trip.

When collecting my caravan at Berbera I took on some men from the

caravan of Captain —, who had recently returned with his wife from an expedition in the interior after a sensational incident, their head shikari having been killed by a Lion within a few feet of them. One of these men told me that if I went to this place, not far out of our intended route, we might get this Lion, which, he said, must be an enormous one from the spoor, and that he would at once recognize the spoor of this Lion if we came across it.

In due course we arrived at the place in question, a wild bit of country with no inhabitants to be seen, but a fair amount of game about. For several days my good pal D. and I were out separately in various directions, but never a sign of Lion spoor. At last one afternoon I came on fresh spoor, at once identified as the "wanted one," and it certainly was the biggest spoor I had up till then seen. I followed him for an hour and then had certain proof that he was close in front, and felt fairly confident of getting him; but unfortunately a heavy thunder shower came on and washed out the spoor. The Lion was travelling in an easterly direction about five miles from our camp. At dinner I arranged with D. that we would shift camp next morning and march in the direction the Lion was taking.

We started at 5 a.m., D. going out to the left of the caravan and I to the right. About 7.30 a.m. I came across the track of our big friend, and soon after D. joined me and we followed the easy spoor together. About 11 a.m. we came to a place where the spoor showed that he had pulled down a Waller's Gazelle, and our gun-bearers were confident that we should find him in a fairly large patch of bush just ahead. To follow the spoor through this we had to go in places in Indian file on hands and knees, as the bush was high and thick. On emerging at the other side we found an open glade with bush beyond, and, in the glade, about sixty yards away, a fine Leopard sitting up on his haunches. I was all for the "bird in the hand" and taking the Leopard, but Geli was dead against it, saying he was sure the big Lion was close at hand, and firing a shot now, though it meant getting the Leopard, would mean losing a very exceptional Lion. Personally, I was very doubtful about the Lion being so near, for the signs of proximity of the previous afternoon were now entirely lacking, and it was with great reluctance I let the Leopard go.

It turned out I was absolutely right, for we continued to follow the spoor at a rapid walk till we came to a village about 2 p.m., having now followed the Lion the best part of fifteen miles. Here we heard that in the early hours of the morning he had jumped the village stockade and taken out a sheep. So much for our being close to him at 11 a.m. some nine miles further back. Some of the villagers came out to help to spoor the Lion. He had taken the sheep up a steep rocky kopje, where we found the remains under a bush. Then we lost his spoor on rocky ground. D. was now dead beat and I had developed a bad sore heel and was feeling pretty done, as we had had nothing since coffee and biscuits at 5 a.m. and had come a long way. Our caravan was visible in the distance, coming up the valley, and D. said that he was too done to continue the pursuit and would descend the hill and join the caravan, make a camp, and get some lunch. I hated to give up such a Lion, and decided to see it through. The villagers had now gone back, except one who

had descended the hillside; and soon after we saw him making signs that he had again found the spoor.

Quickly descending the hill with Geli, I was very soon examining very fresh tracks of our big-footed friend. These soon led into a dense patch of bush, about eighty yards long by forty wide, by a tunnel which was evidently a regular entrance to his lair. Some deep growls informed us that he was at home. I now sent the other man to the far end of the patch and told him to get up a tree and go on shouting so as to act as a "stop" at that end. All this time the Lion kept snarling and grunting from inside the tunnel, while we stood a few yards outside in the bright sunlight. I had the old .500 and Geli my big 10-bore Paradox, for we were still in good Rhino country. We stooped down and peered into the dark tunnel, but could see nothing, though we could hear the Lion all the time within twenty yards of us. We then went to the edge of the thicket, which was in green leaf, and Geli parted the branches, on which the Lion became more noisy.

Peering in, Geli made out the Lion about fifteen yards in, but, looking into the darkness from the bright sunshine, I could at first make out nothing. At last I made out what seemed a dark mass, and telling Geli that the Lion seemed to be crouching with his head towards us, as I could just distinguish his tail flicking beyond, he confirmed my impression. So, taking aim at what I took to be his shoulder, I fired, and moved a few yards to one side in case he charged out at the smoke. A volley of roars followed, and then silence. Geli was now rather excited and asked if I thought I had hit him. I replied that of course I had, if I had correctly made him out.

It so happened that a few days previously I had rated Geli for getting in front of me when stalking an Oryx. Geli now, for the first time in his long service with me, rather lost his head, and said in his broken English: "When Geli get in front after 'origiss' Sahib very angry; if Sahib go first, go first now." This nettled me and I said: "You either think that I am afraid of this Lion or that I don't know what to do. I deny the first; however, I'll tell you what I am going to do. I am going to crawl down that tunnel till I find the Lion, and you shall crawl behind me." "All right," said Geli, "must be Lion kill us." But he never hesitated. I took the big Paradox from him for this dangerous trip and entered the tunnel on hands and knees. We made no sound as the ground was soft with yesterday's rain, and we soon got used to the darkness. After crawling a little way I put my hand on something wet and sticky; it was blood. I held it up to Geli, who nodded. On we crawled for some yards, when suddenly Geli gripped my leg hard and pointed to the right, when I made out a huge Lion sitting on his haunches about ten yards away, luckily with his back towards me, listening to the shouts of the other boy, who was acting as stop. I saw there were some thick branches covering any shot at his upper parts, and could not afford the risk of a deflected bullet. Signing to Geli to stop where he was, I crawled on a few feet when I found I could get a clear shot at his loins, whereby I hoped to break his spine. Aiming as with a shotgun, for it was too dark to see the foresight, I fired. A furious roar and crashing of branches followed and, as the smoke cleared I saw the splendid beast come lurching through the undergrowth towards me, luckily retarded a bit by a broken shoulder, the result of

my first shot outside. When he was about twelve feet away I gave him the second barrel and a two-ounce bullet crashed into his chest, raking him fore and aft. I thought the smoke would never clear, but, when it did, there he lay on his side, close to me, kicking convulsively. The tension was over, and I was thankful we were safe.

With our united efforts we dragged him out to the mouth of the tunnel. He was very fat and heavy, had a splendid mane, and measured 9 feet 7 inches straight as he lay. "All's well that ends well."

The best of sporing Lions in a country like Somaliland is that the excitement lasts so long; you may follow your beast only half an hour before you get a shot, or you may be many hours with the Lion constantly close in front of you, never knowing when the critical moment is going to arrive. On one occasion I spored two Lions in very thick bush and grass for four hours, constantly flushing them close ahead without ever getting a chance. A loud "woof" within a few yards of you, a glimpse of a flicking tail-tuft, and a rush of waving grass, and then you settle down to perhaps another hour's tracking before you move him again.

At times we lose the spoor on stony ground, when I always insist on planting a spear in the ground with a handkerchief on it to mark the last point up to which we have carried the spoor. This is an excellent plan and will save much time, as one's boys are so eager, they rush ahead when looking for the spoor, and are apt to lose the point at which we last lost it, if it has been difficult sporing ground, we may lose some time finding the place, unless one takes the precaution of marking it.

I have killed Lions by having the luck to see them first, but these cases don't come under the head of sporing; and one or two which gave an easy chance early on, and so were devoid of particular interest; but I hope the cases I have quoted will suffice to show what exciting sport can be had sporing them in such a country as Somaliland.

Note.—For further details of sporing and life-size illustrations of all African game tracks, the reader is recommended to obtain "The Hunting and Spoor of Central African Game," by Denis D. Lyell.

SOMALILAND (Continued)

CHAPTER FOUR

ANTELOPES

By LT.-COL. R. E. DRAKE-BROCKMAN, D.S.O., M.D.

A PART from certain species of the diminutive Dik Diks, the Somali country has two or three varieties of the larger Antelopes peculiar to itself. Of these the Dibatag, or Clarke's Gazelle (*Ammordorcas clarkei*, Thos.) and the Beira (*Dorcatragus melanotis*, Menges), are exclusively confined to Somaliland, while two others, namely, Swayne's Hartbeest (*Bubalis swaynei*, Scl.) and the Lesser Kudu (*Strepsiceros imberbis*, Bly.) are found only in Somaliland and the adjacent countries to the west and south.

The Dibatag and Beira are both rare in collections of big-game trophies. Few sportsmen can claim to have obtained specimens of both species. The reason of this is mainly due to two factors. Although the haunts of the Beira are easily accessible to any sportsman landing for a shoot of ten to fourteen days in British Somaliland, he either has been attracted by the larger game in the interior or has been unsuccessful in his efforts to stalk and shoot this comparatively rare and elusive little creature.

The Dibatag, on the other hand, is only found in the far interior, in a circumscribed area, the greater part of which for years was in the hands of the Mullah and his dervishes.

I might also add another factor which has had much to do in preserving both species, and that is, they are protected in quite a remarkable way by their coloration, which blends so admirably with the tints and shades of their natural surroundings. To take the Beira first. It is not only quite a small Antelope, never more than two feet high at the shoulder, but it has a pelage the colour of which is extremely difficult, even at close quarters, to differentiate from the tints of the dried herbage and limestone rocks on the rough hillsides which it invariably frequents.

The flat-topped hills, preferably isolated and sufficiently extensive, either on the sun-parched maritime plain or high up on the Golis range of mountains, six thousand feet above sea level, are its only haunts in Somaliland. A coastal belt, probably not more than seventy-five miles in width in any part of British Somaliland would, I think, mark its range.

To obtain a Beira, a light rifle, good binoculars of not too high magnification and rope-sole shoes or boots are essential. On the rock-strewn hillsides, hobnailed boots would be sufficient to scare any Beira, probably long before the sportsman even got a glimpse of it. In the early mornings they are frequently found feeding or sunning themselves on the flat tops of the hills, but when disturbed they invariably take to the hillside and

run along in and out among the bushes and boulders just below the crest. I have never known them to leave their favourite hill. They will go round and round it just below the crest, often giving the sportsman only a fleeting glance of them, but, if he perseveres and keeps his eyes open and goes slowly, they or one of them will sooner or later stand as though depending on their protective coloration to elude him and thereby give him a shot at anything from fifty to one hundred yards. I know no antelope more difficult to spot in its natural surroundings than the Beira. If you happen to take your eyes off it for a second or two, it is difficult to pick it up again unless it moves. Their hoofs, unlike those of the other hill lover of Somaliland, the Klipspringer (*Oreotragus saltator somalicus*, Neum.) are shaped like those of most other Antelopes but have a substantial soft cartilaginous pad posteriorly, which enables them to move both swiftly and silently over the rocks and stones. The ears, too, are distinctive. For so small an animal they are remarkably large and broad, as though especially adapted for acute hearing, and it is more than probable that this fact enables them to hear the hunter long before he sees them and keep well out of range. They are usually seen in herds of four to seven individuals with one or two adult males in the herd. I once found a herd of no less than twelve and subsequently saw them on several occasions, but this, I fancy, must have been an exceptionally large herd.

The horns are short, stout and ribbed for half their extent, and closely resemble those of the Oribi. Their size and weight are almost exactly similar to that of the Klipspringer. Owing to the size of their ears it is almost impossible, except at close range, to pick out the males, as the ears almost completely hide the horns.

The female is usually slightly larger than the male, so it is advisable as a rule not to shoot the largest animal in a herd. A good head carries horns 4 to 4½ inches in length, and only the males bear horns.

Beira are very loath to leave their favourite hill, and, if driven away from it one day, will return to it the next. They appear to be quite independent of water, like so many of the desert-loving animals.

The Dibatag, in general conformation, appears at first sight to be a relative of the Gerenuk or Waller's Gazelle (*Lithocranius walleri*, Brooke) but on closer inspection it soon dispels this idea. Unlike the Gerenuk, which lowers its head and elongated neck almost to shoulder level and tucks its tail away between its buttocks when running, the Dibatag throws its head well back until the neck arches over the shoulders and, at the same time, elevates its tail until that appendage bends forward towards the head. Like the Gerenuk, it lives in bushy or parklike country, avoiding stony surfaces. Its sole habitat is in a waterless area in the heart of the Ogadan and Dulbahanta country in the very centre of Somaliland, and it appears to have a predilection for the Nogal valley, where there is a distinctive and peculiar flora. Most of the trees and bushes on which it browses are of a highly aromatic nature, and doubtless it is one or more of these which constitute its favourite food and keep it to its restricted locality. Nearly all these trees—known to the Somalis by the distinctive names of garone, rahanreb, tebuk, golelu, mogoleh, and ainger—produce a gum resin, or bdellium. I have never found the Dibatag outside this area.

Stalking and shooting the Dibatag present no particular difficulty.

They, however, may easily be overlooked, unless the spoor is being followed, or they are on the move, owing to their protective coloration harmonizing so perfectly with their natural surroundings and also to their habit of standing stock still if the hunter's gaze and movements are not directed towards them. I have on one occasion got to within very close range of a Dibatag by walking along parallel to the direction in which it was going and, had it not been for a flick of its tail while it was standing broadside on as it gazed at me, I should have passed on and lost it, so perfect was its protective coloration as it stood among the dried and stunted trees. Owing to the featureless nature of the bush they frequent, the best and quickest way to find them is to ride through their haunts on a camel, until one comes on the fresh spoor, when the sportsman can dismount and track down his quarry.

I have found Gerenuk and Dibatag browsing and consorting together, but, on being disturbed, the herds separated and trotted off in different directions. They are usually seen three or four together. Five is the most I have seen in a herd. The males only carry horns. The record pair is said to be 13 inches in length, but this must be quite exceptional, and heads with horns $8\frac{1}{2}$ to 10 inches along the curve are good.

The Lesser Kudu (*Strepsiceros imberbis*, Bly.), the Somali names of which are Godir arreh or Dar ād, has a wide range in Somaliland, Abyssinia and the Galla countries to the westward, and also south into Kenya Colony. It is always found in more or less dense bush country where the undergrowth is composed of aloes and sansevieria, which affords it plenty of shelter during the heat of the day. It ranges, in suitable localities, from near the coast, in the vicinity of the town of Bulhar, and thence westwards in among the foothills of the Golis Range by way of Hargeisa to Abyssinia and the Danakil country. It invariably keeps to the flat and stoneless bush country and never goes into the hills in its immediate neighbourhood. In the writer's opinion it is the most beautiful Antelope in the world. Standing no more than 42 to 45 inches at the shoulder, it is chiefly remarkable for the speed at which it covers the ground when scared, taking every bush in its way in graceful leaps and bounds. On one occasion the writer came upon a fine male unawares while it was lying up during the heat of the day in a dense patch of bush. It leapt to its feet and cleared a bush over six feet in height, over which it seemed to hang, poised in the air for an instant, presenting a spectacle of grace and agility beyond expression in words. Once scared, it is very difficult to approach again, so, when hunting it, it is wise to proceed as cautiously and circumspectly as possible, so as to take it unawares, when it will more likely than not give an easy shot at close quarters. If the beast is badly scared it is wiser to give up the chase for the day, as its acute sense of hearing will enable it to give you a wide berth, and the odds are heavy against your ever getting a glimpse of it again. When the writer shot his first Lesser Kudu he described it as the Apollo of the Antelope world, and he is of that opinion still.

The older males are usually found roaming about alone. Sometimes two young adult males may be found together. The females are almost invariably found in small herds of three, four, or five individuals, which may or may not be accompanied by a young male or two. When disturbed they frequently give vent to a peculiar harsh bark.

Only the males carry horns, and a good average pair would measure 26 to 28 inches along the curves. The record head is just over 35 inches, but 30 inches or more must be quite exceptional.

The Lesser Kudu shows a predilection for country similar to the Bushbuck, but whereas the latter is always found close to water, preferably a river, the former seems to be more or less independent of water, relying on the heavy dews and the juices of the succulent creepers and bushes for the little moisture it requires.

PART SEVEN

KENYA

CHAPTER ONE

(I) GENERAL

By CAPTAIN A. T. A. RITCHIE
Game Warden

KENYA may claim to be a big game country perhaps more justly than any other part of Africa, for Elephant, Rhino, Giraffe, Hippo and Buffalo are all numerous and widely distributed, and Lion, though nowhere so thick on the ground as over the Kenya border on the Tanganyika Serengetti, are found all through the game areas. Antelope also present an astonishing variety, some thirty-five species, with innumerable geographical races, being indigenous. Cheetah, two species of Zebra, two species of Monkeys, and a number of birds complete the list of "game" animals, using the term game here to mean animals protected under the Game Ordinance. In addition to the game animals, there are a host of beasts not protected, but of interest to the sportsman and naturalist. Leopards, Baboons, Monkeys, Giant Hogs, Wart-hogs, Bush Pigs, Hyenas, Jackals, Servals, Civets, Ant-bears and a multitude of the smaller furred folk, contribute to the amazing richness of mammalian fauna; but with these lesser creatures we are at the moment little concerned.

Kenya is remarkable, not only for the variety and abundance of its game, but also for the diversity of country in which it is found; within the confines of this comparatively small corner of Africa lies the climatic epitome of a continent—one might well say of the world itself.

The coastal zone, much of it dense, damp, tropical jungle, gives way to the vast dry bush country where thorn is the predominant characteristic. The bush in turn merges into the higher open plains from which rise the great forest-covered massifs and mountain ranges. Above the forest zone comes the semi-alpine flora, and then, on Mount Kenya itself, the snow.

It might be supposed by those well acquainted with the animal life of Asia or the new world, that each zone would have its peculiar fauna with but little overlapping or trespassing of species outside their adopted areas. The very opposite is the case, for though many animals have marked predilections, almost all may be found in country quite different from their typical habitat, while a great number, indeed the majority, have the most catholic tastes. Elephant, Rhino, Buffalo, Eland, Water Buck, Bushbuck, Duiker, Pygmy Antelope and Leopard, to name a few extreme examples, are found from the snow line, or near it, to the high

tide mark of the Indian Ocean. Two of the most "local" and topographically fastidious animals even, Bongo and Situtunga, occasionally show extreme broad-mindedness. The former, typically denizens of the high bamboo forest, are resident in one totally dissimilar area, the Chepalungu, which is a hot, low-lying, dry cedar forest; and the swamp-loving Situtunga have been found living in a hill valley that would barely satisfy a Reedbuck.

Kenya, then, can show an astonishing variety of animal life in an even more astonishing variety of environment. We may now consider one by one some of the more important game animals.

(2) SOME OF THE MORE IMPORTANT GAME ANIMALS

ELEPHANT

Elephant are widely distributed in Kenya. Indeed it is safe to surmise that there is not an acre of land within the boundaries of the Colony, with the exception of snow slopes and precipices, that has not been traversed at some time or other by these great beasts.

In these days, the settlement of the highlands, the cultivation of native reserves, the growth of townships and trading centres—in short, the development induced by the coming to Africa of civilization—have modified their migrations and driven them from many of their old haunts. There are still people in Kenya who remember Elephants drinking within two hundred yards of the present site of the game warden's office in Nairobi.

The great stronghold of Elephant is now the vast bush country, and there also the biggest bulls are found. The Tana River, from where it runs on to the plains for its seven-hundred-mile wander to the coast; the Athi River from near Machakos onwards; the Voi River and the Tsavo; the northern Uaso Nyiro and the Lorian swamp in which it loses itself except when in full flood it spills over into the Lak Dera; the Northern Game Reserve with its numerous water holes fed from mountain springs; these are some of the main areas where, in the dry weather, you may expect to come on the old hundred-and-twenty-pound bulls watering. During and after the rains they are dispersed through thousands of miles of bush and it is hard to find them.

The weight of ivory carried by the old bulls in the bush country, strikes a higher average than anywhere else in Africa. A few figures in this respect are illuminating. The last year in which, owing to high ivory prices and low licence fees, Elephants were heavily shot in Kenya was 1927, and in that year some 170 were killed on licence. The average weight of the 321 tusks exported worked out at 68 lbs.—68 lbs. per tusk, not lbs. per elephant! Among those tusks were forty-six of over 100 lbs. Amazing figures, and the great majority of the Elephants to which they refer were killed in the area I have mentioned above. Since 1927, with high licence fees and a falling ivory value, comparatively few Elephants have been killed; and hundred-pounders and over are still to be expected by anyone who is prepared to take the trouble to look for them. There are other Elephants in Kenya. There is a herd of some two thousand near the Tanganyika Border between the Mara and Lake Victoria. There

is a herd of five hundred odd on Mount Elgon. There are Elephants on the Aberdares and some on Mount Kenya which, I believe, never descend to the plains. There are a considerable number in the Kerio Valley and Turkana. Some big bulls have been shot, in the past, from all of these herds, and undoubtedly some still remain, but no one wanting heavy ivory would now look for it among them. The bush is the place.

RHINO

The distribution of Rhino in Kenya is somewhat similar to that of Elephant: practically identical in the eastern part of the Colony, in fact, but less extensive to the west. Unlike the restless Elephant on his perpetual round of feeding grounds and water holes, Rhino remain year in and year out in their own little patch of bush or forest, and to move a family of them needs considerable and persistent persecution. They have thus suffered more than Elephant by the opening up of the Colony; for they won't move and they won't make friends. They have also suffered more in recent years from native poachers, for they are, of course, easily killed by the bush folk with their deadly poisoned arrows; and the high value and portability of Rhino horn, and the greed of Indian and Arab middlemen have supplied the incentive.

In spite of this, Kenya has still a vast number of these great beasts. They are nowadays found mostly in the thick mountain forests or the equally dense thornbush and sansevieria country; only in the Southern Game Reserve may one commonly expect to find them wandering on the open plains at high noon, as they did of old.

There is a widespread belief among the natives that there are two distinct Rhino in Kenya, a forest and a bush type. It is said that the forest animal has longer legs—to allow him to get over fallen tree trunks which litter the forest paths—that he has a longer horn, and that he is more wary and nervous, and less bellicose. Be that as it may, it is certainly the case that seldom indeed is a long horn seen on a bush animal; while some splendid specimens are found on Mount Kenya and the Aberdares. I know of a 42-inch, a 38-inch, and a 37-inch, all three obtained in those forests not so very long ago, while a 20-inch horn is no bad trophy from a low-country beast.

Anyone wanting to shoot a Rhino can find one in an hour if he chooses his times and seasons, and is content with a moderate trophy. One morning I counted the spoor of over a hundred which had watered during the night along a mile and a quarter of the northern Uaso Nyiro; most of them were away back in their thickets before dawn, but I saw seven still lingering near the banks. But if a fine horn is looked for, you must hunt the forest of West Kenya; and if you get something good, you will have earned it thoroughly.

BUFFALO

These animals are found throughout the Colony, quite frequently, even, on farms. In some few places, where they are left undisturbed, they remain in the open for most of the day, caring little, apparently, for the heat of the sun; but for the most part herds retire to dense thickets or forest patches at or soon after dawn, remaining hidden till darkness again falls.

It is no easy matter to say in what part of the Colony the biggest heads



Plates 67—68

KENYA

Top. A MANED LION.

Bottom. LIONS IN THE HEAT OF THE DAY.

are to be found. The Kenya forests in the vicinity of Nanyuki have produced a number of 50-inch and over during the last few years. The record head—somewhat of a freak in shape and lack of boss weight—of 56½ inches comes from near the junction of the Thika and the Tana Rivers. Some very fine heads have been obtained on Marsabit; while the Mara River-Siena country, Tambach, the Aberdare and Marmanet forests have also shown that big heads are not necessarily confined to any particular area or zone.

GIRAFFE

Kenya boasts three races of Giraffe. In the Northern Frontier Province there is the handsome reticulated animal; in the north-west the somewhat similar *Cottoni*; while over the remainder of the Colony, in suitable areas, *Tippelskirchi* is common and widely distributed. Except in part of the thorn country, where they are persecuted by the bush folk—a malediction on those elusive gentlemen!—their freedom from molestation makes them as tame as the deer in Richmond Park; and they form an ideal subject for the cameras of Sunday snapshot enthusiasts.

HIPPO

These animals are found in all the larger and some of the smaller rivers and lakes, from the coast to the high plateaux.

At one spot on the coast, indeed, they may be seen in the sea itself, disporting in the surf. They are also in little Lake Ol Bolossat at an altitude of some 7000 feet, where you may find a solid lump of ice in your basin when you go out of your tent for an early morning wash.

Although they are so widely dispersed, they cannot be said to be really numerous elsewhere than in Lake Victoria.

LION

Are found throughout the game country. Some of the best Lion country of former times—the Athi Plains, Laikipia, the Kinangop plateau and the plains of the Melawa and the Uasin Gishu plateau—now supports large herds of high-grade cattle, and there is no room for his majesty. In parts of the Masai Reserve, also, his numbers have sadly decreased as compared with the early days: a state of affairs for which we must blame night shooting and trapping—both, happily, now things of the past.

The best-maned Lion in Kenya are those on the upland plains. Heat and thorn scrub are both factors tending to prevent the carrying of a heavy mane, the one acting physiologically and the other physically.

The finest animal that I have seen in recent years was killed on Eburru Mountain, which is an offshoot of the great Mau range. Some good Lions have been killed recently in several parts of the Masai Reserve, and also in the extreme north of Laikipia on the borders of the Northern Game Reserve; while it was no mean beast that, a couple of years ago, used to walk through Nairobi at night, attracted by the roaring of a captive animal, and left, on one occasion, a fine bunch of long dark hair on a barbed wire garden fence within some half-mile of my office.

Perhaps one of the most pleasant areas in which to hunt Lion is the Voi-Tsavo-Taveta country, where they are fairly numerous, and also, it may be said, fairly wary.

In only one part of the Colony are Lion at present a serious nuisance; in the Northern Frontier Province, on the Dawa River and in Tanaland, they kill a considerable number of cattle and, at times, it must be admitted, their owners. Unfortunately Lion in neither of these areas offer much inducement to the sportsman, being, for the most part, but poor beasts compared to the fine creatures of the upland plains.

GREATER KUDU

Greater Kudu have a very intermittent distribution in Kenya, small, isolated herds being found in a number of places. They are, however, nowhere sufficiently numerous to warrant their inclusion on a licence, except in Turkana and the Northern Frontier Province. It is in the latter area that they may most successfully be sought, for there they are but little disturbed, although reasonably accessible and, more importantly, carry very fine heads. Not long ago, on Mount Kulal, the late Commander Glen Kidston shot a 56½-inch. A little later, on the same mountain, I saw a beast which I am confident was within an inch of sixty: he was one of five bulls lying out in the morning sun, and he made the other four—of which two were quite warrantable animals—look weaklings indeed. I have said above that in the Northern Frontier Greater Kudu are reasonably accessible. Thank goodness no bold pioneer has yet succeeded in driving a car to within hunting distance of Kulal, and one still has recourse to camel, or perhaps donkey, transport, to get up on to that wonderful hill.

LESSER KUDU

Lesser Kudu are found throughout the low-lying bush country, and big heads may be expected in a number of different areas.

Possibly the locality most likely to produce something exceptional is between Maungu and Kasigau, whence a 32½-inch head with the amazing spread of 21 inches has recently been taken.

I have also seen a very fine head from the Suk-Turkana border, and others but little inferior from the Northern Frontier Province.

On the Kinna River, near its confluence with the Tana, I once saw eleven Lesser Kudu together—a very unusual assembly, in my experience.

ELAND

Eland are found from the coast to Lake Victoria and up to 11,000 feet on Mount Kenya. They do not, however, penetrate far into the dry desert country of the Northern Frontier Province and Turkana. Although one of the animals most sought after by the "commercial" shooter, and accordingly much harried in past years, some large herds are still to be seen. I have myself counted one hundred and eighty-two together, and I have recently been told of a herd of well over two hundred seen on the Yatta plains near Seven-forks on the Tana.

The East African race does not, of course, carry as fine a pair of horns as the southern race, a 30-inch head being very unusual in Kenya. It is impossible to say that any one part of the Colony can show larger heads than any other; if I was compelled to make a choice I should say that the Voi-Taveta area and the vicinity of Nairobi appear likely to grow an outstanding animal.



Top Left. HUNTER'S HARTEBEEST.
Top Right. LESSER KUDU. A RECORD SPECIMEN.
Bottom. RHODESIAN BUFFALO.

ORYX BEISA & CALLOTIS

Beisa ranges northwards roughly from the equator, except to the east, where it follows the north bank of the Tana down to near its mouth.

It is a common animal in parts of the Northern Frontier, especially in the Uaso Nyiro River area.

The best head of which I have knowledge came from near Kulal, where, however, these animals are not usually numerous.

Callotis is found over the southern part of the Colony in suitable areas. In the north-eastern part of its range it is separated only by the Tana River from the Beisa. It is probable that, in the vicinity of Lake Natron, Callotis heads are as good as, if not better, than elsewhere, though, as with Beisa, it is extremely difficult to make any definite statement as to choice areas in view of the migratory habits of these animals.

S A B L E

Sable Antelope in Kenya are found only in the coastal zone and the immediately adjacent hinterland, but within those confines they are much more widely distributed than is generally known.

The East African race marks the northernmost extremity of the range of this fine Antelope; it is noticeably smaller in body and horn than the other races and, in consequence, has attracted comparatively little attention from sportsmen. It is very probable that the existing record of 40 inches will be exceeded when more specimens are obtained. Anyone wanting to hunt for a fine head, and not merely anxious to be able to add to his list "Sable 1," should choose a time when the grass is short; for after the rains the herds are in densely covered country, and luck alone must be relied on.

R O A N

Roan, always very locally distributed in Kenya, have gradually faded out from a number of their old haunts. Now they may only be shot in the Masai Reserve and Southern Kavirondo district, where they are still fairly numerous. Anything in the neighbourhood of 29 inches is a good head for Kenya, and the vicinity of the Mara River about the Tanganyika border will probably give a good chance of such an one.

B O N G O

These splendid animals are found in several of the high and one of the low forests of Kenya.

On the Aberdare-Kinangop range they are numerous and appear to carry somewhat better heads than elsewhere; though in parts of the Mau forests and particularly in the vicinity of Londiani Hill there may well be animals equally good; for in this latter area they have very seldom been hunted, while the Aberdares, in view of their accessibility, have provided almost all the trophies secured by sportsmen. Within the last month a splendid head has been shot by Mrs. Cartwright near the Katamayu head-waters. It is beautifully symmetrical, 36½ inches, with a spread of 17½ inches at the tips.

The low forest Bongo of the Chepalungu appear to be smaller animals than the high forest dwellers, and are, without doubt, much more

courageous animals: for, if wounded or brought to bay, they will charge without hesitation; and the natives there hold them in very great respect, which is not the case elsewhere to my knowledge.

It was customary in the past to allow anyone going after Bongo to use dogs, with the aid of which the hunt was a simple one. The justification for this was that the natives inhabiting the forests—Wanderobo and others—were always harrying them with dogs, and, in consequence, straight hunting by sportsmen was rendered almost impossible. Now, however, this illegal hunting by natives has been greatly reduced, if not entirely put a stop to, and the use of dogs is no longer tolerated; a number of good sportsmen have proved that they are not necessary.

IMPALA

These animals are found, in the vicinity of water, over the greater part of the Colony except the northernmost zone. Kenya heads are considerably larger and heavier than elsewhere, though a few very fine animals have been obtained over the Tanganyika border near by. The Mara River, the northern Uaso Nyiro and the Kerio valley have all provided some outstanding heads, while in the Game Reserve a couple of miles from Nairobi one can see, any day, several beasts whose heads are worth a place in any collection.

DUIKER

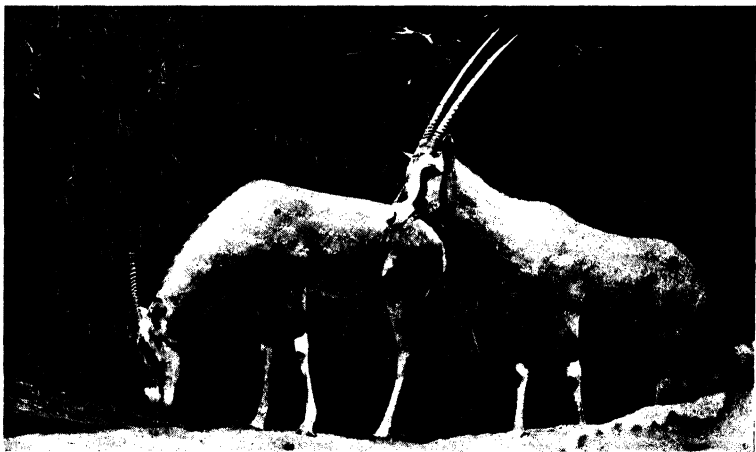
Although these animals can hardly be described as "more important game," they may be mentioned here in view of the amazing number of species and races found in Kenya.

Red Duiker, Blue Duiker and Bush Duiker all show a variety of races. A yellow-backed Duiker is found in the forest near Kericho. A curious little animal with mottled legs, similar to, if not identical with, *C. adesri* of Zanzibar is found in the Mida-Arabuko forests north of Mombasa.

On the summit of Mount Nyiro, at 9000 feet, lives a mysterious Duiker which has been seen by reliable observers, and is described as black. It has never yet been collected. I have only seen its spoor, time robbing me of the chance of getting what may well prove to be a new beast.

HUNTER'S ANTELOPE

These fine-looking animals, suggesting in appearance a mixture of Hartbeest and Impala, are found only in a comparatively small part of Kenya and the adjacent Italian Territory. They inhabit a zone some sixty miles broad north of the Tana River, which is, roughly, as follows: from about Massa Bubú on the Tana, downstream to within some forty miles of the coast, the zone runs for about one hundred and twenty miles, first north-easterly and then northward. Within this area they are fairly numerous, being found in herds of from half a dozen to forty or more, though it is uncommon to see more than twenty together. The herd habits appear to be the same as in Impala. There is a male herd of old and young animals. There is also a female herd—with a number of very young males in it, of course—lorded over by a single sultan. They prefer dry, open plain country, the large Ngerabeli plain near Massa Bubú being a favourite resort when the grass is short. I have, however, seen



Plates 72—74

KENYA GAME

Top. FRINGE-EARED ORYX (*B. CALLOTIS*) FOUND IN KENYA AND TANGANYIKA.

Centre. HUNTER'S HARTEBEEST ON THE TANA RIVER.

Bottom. ORYX BEISA. COMMON IN SOMALILAND, KENYA AND S. ABYSSINIA.

them often in broken thorn bush, and, on two occasions, in very dense bush country.

Little enough is known of these animals. They are, almost throughout their range, very wary and, on scenting danger, will often go for miles, though they have the curious habit of standing, when a member of the herd is shot, for a considerable time before making off. Lions are their chief enemy, though doubtless Leopards and Wild Dogs kill a few. Fortunately the Somali do not, I think, kill them at all; and their wildness cannot be attributed to human molestation.

Hunter's Antelope appear to seek the company of Oryx and also of Topi, and are often accompanied by a single individual, or a herd, of either of these species. Although such associations are probably defensive—they are hardly likely to be æsthetic, and are certainly not fortuitous in character—their wariness and watchfulness are not relaxed or left to their temporary companions. Indeed, no matter under what conditions Hunter's are found, it will be seldom that you will catch them napping. Their sentry, standing on a hillock, for all the world like an old Kongoni, will probably have seen you first, and a bunch of white tails, disappearing across Africa, will be the commonest aspect of Hunter's that you will see.

GENERAL OBSERVATIONS ON SEASONS AND DISTRICTS

There are typically two rainy seasons in Kenya, the one commencing about the end of March, and the other in early November, approximately. In speaking of rains in Kenya, one must qualify any dogmatic statement, since they are liable to be erratic and do not play always according to the rules.

Normally, in the Northern Frontier Province and the coastal area, the heaviest rain will be that falling between mid-October and mid-December. Up country, on the other hand, the long rains, from the end of March to May or June, are the most important.

It is very difficult to be any more precise on the subject of choice of districts for a shooting trip, for conditions naturally alter from season to season, as a result of climatic and other causes. For a general bag, the Masai Reserve, the Voi-Taveta country, the Northern Frontier Provinces all have their champions, and a choice must depend largely on the character and individual predilections of the sportsman.

There is still much good game country in Kenya which has never been shot over, owing to its inaccessibility; and there is also an abundance of game even now in country that has been heavily shot for the last thirty years.

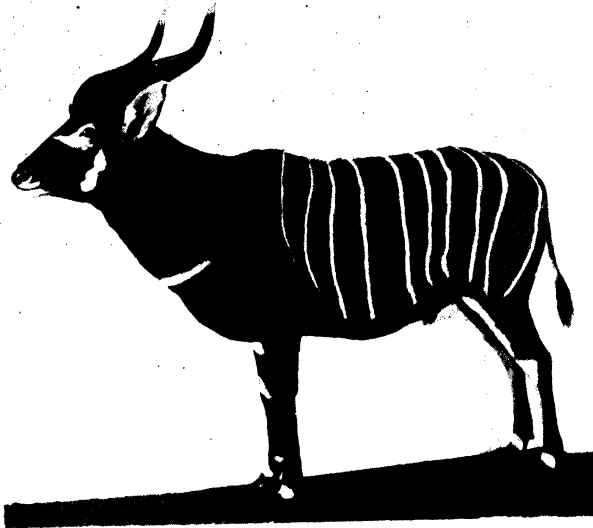
GENERAL OBSERVATIONS ON WAYS AND MEANS

Transport over almost all the usual shooting country in Kenya is now mainly mechanical. Porters are hard to get, for the most part, at any rate in sufficient numbers to make a protracted safari possible without the use of some auxiliary means of transport.

For this, and other reasons, among which may be cited cost and the impatience of the age, the old-fashioned porter safari is now a thing of the past.

There are in Kenya several reputable firms who outfit the visiting sportsman, providing everything from a white hunter to a toothpick. A certain number of white hunters do their own outfitting, and a certain number of visitors do likewise. In this connection one positive statement can be made: everything necessary for a shoot, including firearms, photographic apparatus, clothes, and food can be purchased in Nairobi.

The only thing that a visitor need bring is an equitable temperament and a cheque-book. The former will allow him to enjoy one of the finest sporting countries in the world, and the latter is, unfortunately, as essential in Kenya as elsewhere. It would be absurd for me to attempt to give, in the limited space at my disposal, any estimate of the cost of a shooting trip in Kenya. The cost will vary with a number of factors: the requirements of the sportsman, his experience, the duration of the trip, and the scale of luxury insisted on. A champagne-and-ice safari may run into thousands. A filter-and-water safari can be done very inexpensively. Whatever it costs, one thing is certain: it will be worth it.



Plates 75—76

KENYA

Top. HUNTER'S HARTEBEEST. TANA RIVER. ONLY FOUND IN THE ONE DISTRICT OF E. AFRICA AND, FROM HIS INACCESSIBILITY, ONE OF THE GREATEST RARITIES.

Bottom. BONGO. ABERDARE HILLS. A VERY RARE AND ELUSIVE FOREST-DWELLING BEAST, FOUND IN A NARROW BELT ACROSS AFRICA FROM KENYA, THROUGH THE CONGO TO SIERRA LEONE. (BOTH MODELLED IN THE ROWLAND WARD STUDIOS.)

KENYA (Continued)

CHAPTER TWO

BONGO-HUNTING IN KENYA

By MAJOR H. C. MAYDON

IF you were asked to make a list of the six rarest heads in Africa, which are also fine trophies, Bongo would certainly be included, if they did not actually head the list. To me they have always sounded as one of the great treasures of big game hunting. Stories of months-long hunts, with patience and endurance at the breaking point, in West Africa, and of many a hunt that failed in Kenya, had but added a glamour to the name of Bongo, that ranked it high among all the rarest quests of big game.

Now that my luck has held and Bongo-hunting has become a memory, I still feel that he deserves his reputation.

It seems unfair that a stranger should arrive and, from his all-too-short experience, try to describe a hunt that the dwellers in the land know so much better. But what if the dwellers will seldom tell? Moreover, first impressions are generally good ones, and we from the outside may note things that the old hands have forgotten.

The Kenya Bongo possesses two great advantages over most of his brethren of other lands in that his habitat is most easily accessible, and it is located in an almost perfect climate. As an offset is the serious question of a licence, the most costly in the world, when possibly only the one variety of game is wanted. For although Kenya is rich in game, the hunter must be rich in proportion who can face his taxidermist's bill and find a home for his trophies if he makes a complete collection.

Several people in Nairobi were kind enough to advise me where to go or whom to consult for a Bongo shoot, but from a host of localities, all more or less close to the railway, I chose the nearest to Nairobi, with the idea of learning the ropes as close as possible to fountain head. The high forest country at the western foot of the Aberdare Mountains, or beyond Nakuru on the Mau escarpment, seemed the two most hopeful localities. Finally, lured by the chance of making my start direct from Nairobi, I decided on the Aberdare forest and to meet my requisite porters at Kiambu, about ten miles out. Since my objective was to be the country just to the west of Mount Kinangop, a glance at a large-scale map will show that Kajabe railway station or Naivasha would have been nearer my destination, but there seemed an uncertainty in procuring porters there and, as I wanted to see the country, I chose the longer route.

The D.C. at Kiambu was kind enough to promise the porters at two days' notice, and I employed the time in collecting camp kit and stores at Nairobi.

I had arrived with nothing but my guns, and it may be of interest to would-be visitors to know that everything can be obtained at Nairobi at a fairly reasonable figure without reference to the regular safari outfitters. There are some good Indian shops in the bazaar which are used to the game and can supply complete camp outfits and stores, etc., at a moment's notice. Although I had been warned that Kenya prices are high I do not consider them extortionate.

Stores, cooking-pots, cutlery, etc., for six to eight weeks, about £15.

Camp outfit, comprising one double-fly 40-lb. tent and two servants' tents; camp bed and bedding—table, chair, water bottles, canvas hold-all and chest, lanterns, shooting-clothes and servants' blankets, £25.

It must be remembered that most of this outfit would have lasted equally well for six months as for two, and could be resold or kept at the end of the shoot.

The next detail of importance was to find a cook and a body-servant, and in this I was helped by the Servant Registration Office at Nairobi, who found me two excellent boys, one of whom spoke English and the other Arabic. Their pay was £2 each per month, and I found them much more honest and trustworthy than the usual run of haphazard servants.

I motored out with my baggage and servants to Kiambu, and there met my ten Kikuyu carriers under the charge of a Government headman, and we started our safari on the 24th December. I agreed to pay my porters at the rate of eighteen shillings each per month and I supplied them with 2 lbs. of Posho (mealie meal) each per day, which had to be carried with us. I later replenished this from Kajabe and Naivasha at five shillings per 50-lb. sack. I found the carriers fair, and capable of a sixteen-mile march per day at a rate of three miles per hour. They carried 60 lbs. each. But let it be noted that this trip is a test of patience and "smelling out" likely shooting-camps rather than long marches.

I made it in three marches from Kiambu to N'jabini, or about thirty-five miles. The first two days the path zigzags amid thin bush and the endless clearings of the Kikuyu Reserve. The ground gradually slopes upward, broken by ravines, and is widely cultivated with maize, bananas, coffee and varieties of corn. Water in streams and Kikuyu villages are frequent.

The third day one reaches the south-west fringe of the bamboo and tree forest, which is the Government forest reserve. Here paths are rare and there are practically no villages. A few Wanderobo natives still wander in the forest, apparently nomads and hunters by profession, either outcasts from other tribes or more likely the remnants of some almost extinct tribe.

Once on the third day the path emerged from the western edge of the forest on to open grassy slopes, which shelved rapidly down to the sharp escarpment above Kajabe and gave a view across the Kedong valley to the west. Soon after it turned sharply eastward and headed direct for Mount Kinangop, the highest peak of the Aberdares, which had been occasionally visible for some miles. Thence the path followed the northern



Plates 77—78

KENYA

- Top.* BONGO BULL. NEAR KIJABI. PROBABLY A UNIQUE PHOTO OF THIS SELDOM SEEN BEAST, GIVING AN IDEA OF THE DENSE JUNGLE HE INHABITS.
- Bottom.* BUFFALO IN COVER. HERDS OF BUFFALO IN KENYA OFTEN MAKE THEIR CHOSEN HABITAT IN DENSE FOREST HALF WAY UP THE MOUNTAINS.

fringe of the bamboo forest, across a series of open grassy glades, enclosed by shady bush or patches of bamboo. Water was scarce on this march. Meanwhile, northward a broad open grassy plain, some ten miles square, stretched from the foot of the Aberdares on the north-east, along the escarpment above Naivasha lake, and thence bent southward above Kajabe and Mount Longonot.

This open veldt-like plain is divided up into farms, of which the most attractive nestle at the foot of the Aberdare slope. They offer the three essentials of wood, water, and grass and are mainly cattle and wheat-growing farms.

The third night I camped within sight of a group of farm-houses at the western foot of Mount Kinangop, and on the forest boundary of another farm, whose owner was away. It was temporarily in the charge of a Basuto overseer called Paul, and was fated to play a central rôle in my hunting.

Next day, possessed by the shikari's dread of all signs of civilization, I shied off the houses ahead of me and entered the fringe of the forest, a few miles south of them. I had been advised to make for the bamboo forest, near the Chania River and to inquire for a certain Wanderobo hunter whom I never traced.

My first shooting-camp was pitched about five miles south of Kinangop and two miles west of the Chania River, on the edge of the bamboo and ordinary forest, among a maze of grassy ravines, open glades and patches of bush, with dense forest on two sides. Two very moderate Kikuyu hunters volunteered from the nearest village.

The weather was fine with very heavy dew at night and passing showers. The days were warm in the sun but almost chilly in the deep shade of the forest, and very cold at night, with an occasional frost in the open. But I found forest camps both drier and warmer than the open. The altitude here was about 8500 feet, and Mount Kinangop about 1300 feet higher.

Two days of still hunting and spying of open glades showed me plenty of old Elephant and Buffalo spoor (which I did not want) and a salt lick with much Bongo spoor, but nothing very fresh and situated in a hopelessly dense bit of forest.

I moved camp six miles south across the Chania, through dense forest, to the very foot of the southern slopes of the Aberdares. My guides called this place Capata. There were no dwellings or inhabitants, but a chain of open glades amid dense forest. Elephant and Buffalo spoor were fresher here, but signs of Bongo were not promising. The hunters lacked confidence, and spying in the many open glades at the foot of the hills seemed futile.

After three days at Capata I moved camp back westward of the original camp, and tried some good forest not far from the salt lick. Waterbuck and two sorts of Duiker were occasionally seen, and I kept the larder going with an odd Wood-pigeon (*Columba arquatrix*) and Spur-fowl, using the .22 bore, while the folk at N'jabini kindly supplied me with eggs, milk and butter.

So far, in eight days' hunting, I had seen no living sign of Bongo and very little of other game. Very rarely, a loud crash in the densest thickets betokened some heavy animal startled and bolted unseen, but they may

have been anything. I had not then learnt to recognize Bongo spoor. Moreover, in that dry spell the forest revealed tracks poorly to the unskilled eye, while the damp spots by stream or marsh showed apparently fresh spoor that may have been weeks old. However I soon saw that my present guides were unfit to cope with such game as Bongo, so I decided to explore the forest towards the Kajabe end, an extent of some ten miles.

As a good hunter was the foremost consideration we followed the forest edge back westward to the outlying farm, where, thanks to the kindness of the owner and his overseer, Paul, a native squatter headman was produced. He was an oldish man called Canyou, with probably a touch of Wanderobo blood. I do not know if he had hunted Bongo with white men before, but he knew the game thoroughly and, above all, he inspired confidence.

Next morning he collected a younger man as his assistant and, retracing our steps a mile or two, we struck south about eight miles into the heart of the forest. There is a fair footpath which leads back to the Kikuyu plantations. At eight miles we emerged into a long, narrow, grassy glade entirely shut in by bamboo and tree forest. We were then two or three miles west of the Chania River, and the hilly landmarks of Capata were plainly visible, four or five miles away over the tree-tops.

While camp was being pitched, my two hunters went out to look for spoor, and by 4 p.m. one of them returned to say they had a herd of Bongo marked down. I wondered if it was going to be as easy as all that? We entered dense dark forest at once, quartered here and there by game tracks, and within a quarter of an hour were on fresh Bongo spoor. Following up, we soon met Canyou, who by signs indicated that the quarry was near by. Creeping forward stealthily in very dense undergrowth, we almost at once heard a wild crash ahead, sinking in a moment to silence, and my crestfallen hunter signified that the game was up. But as I crouched low, peering under the thickest cover, I saw, less than twenty yards away, patches of red, white-striped, and knew I had at least seen my first Bongo. Was it a cow or a bull, big or small, and what could one do? I crouched doggo, expecting every moment the fatal crash. A moment later, across a feeble sunbeam passed the tips of a pair of horns, gingerly moving away. Caution vanished, and, with it, the sight of the red. I aimed below where the horns had been, fired, and missed. We burst forward and on, one hundred yards downhill, missed the spoor, and doubled back, and, in a fairly open patch, sat down to bewail our luck. And as Canyou muttered and gesticulated, beyond his shoulder I saw again the red patches, white-lined, gliding away amid the tree trunks ten yards away! With rifle up I waited for the head to appear from behind the next tree-trunk. But it never did; the beast turned sharp right-handed, and disappeared like a shadow.

Next day we spent vainly spooring up that herd.

The third day from that camp we started early, carrying lunch and turning west; we pushed on steadily for three or four hours, looking for fresh spoor. Bongo tracks were everywhere, in places worn into deep trails. The ground was damp and soft, and, as the sun seldom penetrated that dense shade, it was hard to find a dry spot to sit and rest, and harder still to the unexpert eye to pick out brand new spoor. The going was difficult, under and over fallen tree trunks, amid heavy green undergrowth, patches

of bramble and webs of hanging creepers, while the ground switchbacked amid a maze of ravines, dells and small hills. The heavy green undergrowth had the appearance of overgrown nettles, stingless fortunately, and reported as favourite Bongo food. But here and there were clumps of true nettles, whose familiar sting brought attention soon enough.

For the most part we stuck to the true forest: big leafy trees of all sorts. There were podo, and many unknown, but cedars and olive were scarce. Now and again we touched patches of bamboo, but these were more common along the forest fringe or along the banks of rivers. From my experience I did not find Bongo tracks so common in bamboo as in tree forest, fortunately, as it is impossible to move silently amid fallen and rotting bamboos.

Now and again my hunters left me to sit and rest, while they hunted round, quartering the ground like game dogs. But at noon we had neither seen nor heard anything, nor marked a single fresh spoor. We headed for camp. We were following a faint track in dense bush in single file, when suddenly there was a crash within five yards of us, and some heavy beast lumbered away unseen by me in the thickets. My men swore it was a Bongo bull, and we picked up the fresh spoor of a big Bongo right enough. We followed up for half an hour, and then froze as we saw the now familiar red, white-striped patches, lurking in heavy bush, fifteen yards ahead. A hasty snap shot, a crash, and we burst our way through to find a big cow Bongo, with 20-inch horns. Most people have shared that bitter disappointment at some time or another. To have bagged a wily beast after really strenuous hunting, only to lose all the joy of the game in finding it a cow. Up to that time I saw no way of avoiding such another disaster—if I were lucky enough to shoot a second. The cow colour seemed to be the true Bongo colour; this one had been a solitary cow, and, in three glimpses I had never seen a head distinctly before the shot.

Nevertheless a cow Bongo with a good head is better than no Bongo, and we had had no meat for a week, so were all pleased.

The next four days' hunting drew blank. Not a fresh sign of game of any sort was seen.

We held a pow-wow, and Canyou agreed that all Bongo must have left our district and gone east or west, either towards the hills or away through the forest towards Kajabe. As it was impossible to move one's baggage and carriers through that dense bush for any distance, we agreed to pull out, and following the forest edge towards Kajabe, seek a new entrance farther westward.

However, once we had reached the open country again both my hunters declared that they knew no other way into the forest, that they were tired, and demanded their pay. This was a disastrous ultimatum, as, to find hunters of any sort in this district is the vital consideration, and in these two I had complete confidence, besides, I felt convinced that they were lying.

Again the Basuto, Paul, came to my rescue and persuaded Canyou to go on with me. We now spent two days wandering up and down the forest edge westward, looking for local Wanderobo to show us a way into the forest and who also knew the country therein.

Native villages in these parts, except for native squatters on white men's farms appear to be non-existent, but here and there are the

temporary camps of a few Wanderobo. The first pair we met made vague promises and bolted during the night. But on the third day Canyou produced a young Wanderobo who agreed to show us a Bongo camp.

An ill-defined footpath diverged from the main track and led us about five miles into the bush. The country here was rather more open, with a chain of open grassy glades. We camped on the site of someone else's previous Bongo camp. Within a quarter-mile of camp was a much-game-trodden salt lick in the swampy corner of a glade.

Canyou had brought a Schenzi dog with him and another he had borrowed from Paul. He insisted that in case of a wounded Bongo, dogs were invaluable. He also swore that dogs could round up an unwounded Bongo, but this I did not feel inclined to test. Nevertheless, the first day out convinced me. We had been wandering in very dense forest and undergrowth for several hours, and suddenly struck quite fresh tracks. Within ten minutes, and despite every precaution we stampeded a herd quite close to us without seeing anything. The dogs were loosed and we rushed forward. The undergrowth thinned ahead of us, and very soon the steady barking of the dogs led us to a spot where they had bailed up a young bull. He was so busy with his head down and his horns on guard that he did not see us, and let us approach to within five yards, when we watched him for several minutes, before he suddenly gave a bound and was swallowed up in the bush in a moment. Despite the disgust of my hunters I was glad he carried an unshootable head, and I hoped that fate would offer a fair head to top a more sporting finish.

The next day was blank, but on the third day we jumped a big bull at ten yards in very dense cover, who crashed away unseen by me, although I was only a yard or so behind my tracker. Canyou had seen him for a moment and swore that he was a big solitary bull, which, judging from his tracks I believe, as also that he was the first bull that we had met.

For by now I felt convinced of two things. First that old bulls are solitary and seldom with the herds. Secondly, that Bongo depend more on their ears than their eyes or noses, especially as the wind in the forest is most elusive. It seemed to me that on every occasion the Bongo had heard us first, and, doubling on their tracks in a hairpin bend, had hidden in particularly dense cover and there awaited our approach to make sure, at close quarters, what enemy, if any, was following them.

Two other points strike me as curious. The first, that on the five occasions we found Bongo, each time we saw or jumped the beasts within a few minutes of finding their tracks. It may have been chance or one of many causes. The second, that when we vainly followed up this solitary bull for four or five hours, he tried to throw us off the scent by wading twenty yards up or downstream in the actual beds of two rivers he crossed, before emerging on the far banks.

My men were much discouraged by this failure, and when the next two days we drew blank again, they wanted to give up and return to their homes.

We now held another pow-wow. Armed with the map, I tried to persuade them to guide me through the heart of the forest towards the Aberdares, with a very light outfit, for three or four days. By the map

it can hardly have been more than twelve miles direct. But this they refused to do, saying they did not know the way, that we should be lost, and such futile excuses.

Finally I persuaded them to try one more day's hunting, and the shikari's best friend, luck, favoured us at last.

We had been doubling and circling in the dense tree forest about two miles from camp. This we had learnt from experience was a favourite haunt of Bongo, where, possibly, the nettle-like feeding was at its choicest for the time. Tracks and well-worn trails spread everywhere, and it needed the expert's eye to avoid following old spoor. Once we crossed the red-hot spoor of a Bushbuck or the like, which but for the eagle eye of Canyou might have led us astray. Then the indisputable tracks of a Bongo herd tempted us. But we backed our luck in the search of a big single spoor and pushed on.

Suddenly it all came with a rush. We found what we sought at last, where the undergrowth had thinned a trifle. Automatically we closed up in single file, rifle ready for a sudden snap shot. The crucial moment had arrived, the wild excitement, the taste of which is worth a four-thousand-mile journey and will be again, as long as there is a to-morrow.

Then came calamity. We had not gone twenty yards when the fourth file, my tiffin porter and leader of the dogs, accidentally let one loose as he strained at his lead. Like a flash the brute dashed by us and ahead along the trail. Within five seconds came a heavy crash in the dense bush ahead, and lumbering crashes down the slope to our right. But the dog had overshot the mark and gone on. We cut a corner and dived into a sea of thickets. Twenty yards below the bush thinned. There, amidst the serried tree trunks, nosing and peering towards where the dog had vanished, stood an old Bongo bull. At that range not even a pumping heart could fail.

He was a good head of 34 inches of the handsome, lyre-shaped type. But above all he and his kind had yielded six weeks' good, straight hunting and, to one shikari at least, they have upheld their high reputation.

Below I append a description of both cow and bull Bongo. I was surprised to note the very great difference in colour between the two. Whereas the cows give the fleeting impression of a striking red colour, which is borne out on closer acquaintance, this bull was almost entirely black. The vivid white vertical stripes are almost identical in both. But the colour difference is so marked that I feel I could never shoot a cow in error again. However, I feel that the solitary beast test is the safest, although not infallible. Bongo are so rarely seen, and the odds against seeing the head distinctly are so heavy, that it is as well to study all the like aids to success.

I add a few notes which may be of interest.

I found that trousers and canvas leggings were the best kit to avoid nettle stings, ants and ticks. Crêpe rubber soled boots, despite a constant wetness, which soaked one knee-high daily, were good and silent. A double Terai hat, drill coat and woolly were just the thing in a forest which seldom admitted a single beam of sunshine. The nights were chilly and damp from dew or rain, and a huge camp fire and three or four blankets were welcome. A mosquito-net is unnecessary, as I saw

none of these pests. Small red ticks and biting ants were the worst troubles of this sort.

It is strange that in all those days spent in the forest I saw so little other game. The ordinary brown Duiker, a little red Duiker, one or two Bushbuck, several Waterbuck, and the occasional flitting shapes of Pig were all. From spoor and hearsay I suspect the presence of Giant Forest Hog, but I never saw them. Hatted Guinea-fowl, Black-bellied Spur-fowl, Red-legged Francolin and Wood Pigeon were fairly common. I saw several Honey Badgers, and the forest was alive with Tree Hyrax; Gereiza (*Colobus*) monkeys were fairly common, and there were two other kinds.

Description of Bongo, taken before skinning:

Cow:

About the size of Kudu, light red-brown with eleven vertical white stripes from withers to tail. Hooves deeply split, but hard and polished. A slight mane along dorsal ridge, 1 inch long. A white collar round lower neck, and a white spot on each side of jaw.

Girth behind shoulder, 66 inches.

Height: heel to point of shoulder, 36 inches.

Height: heel to point of withers, 52 inches.

Girth: neck behind base of ear, 27 inches.

Girth: thickest neck, 37 inches.

Length: nose to base of tail, 81 inches.

Bull:

Body and back very dark brown to black (rather mangy). Thirteen white vertical stripes across back and flanks from neck to tail. Grey patch on coronets and on all four knees, and up cannon bones of hind legs. Grey (tinged brown) band round base of neck underneath. White patch on forearm below shoulder.

Face, black tinged with brown. White chevron at base of nose, below the eyes, and another both sides of lower jaw. Neck brownly black, with grey band as noted. Hooves very cloven.

The male is infinitely darker in colour, heavier, and more massively built than the female.

Height at shoulder, 40 inches.

Height at withers, 55 inches.

Length: nose to tail (not stretched), 93 inches.

Forearm: girth, 15 inches.

Length: neck, 25 inches.

Girth: neck behind ears, 35 inches.

Girth: neck at broadest, 52 inches.

PART EIGHT

UGANDA

CHAPTER ONE

GENERAL

By A. C. KNOLLYS

Sometime District Commissioner

QUITE recently a well-known big game hunter, who had never been to Uganda, expressed an opinion that that country possessed a very hot and unpleasant climate. It is, however, safe to state that such is not the case.

As the Equator passes practically through the middle of the Protectorate this may seem strange, but it must be realised that the 20,000 square miles of Lake Victoria Nyanza and its shores are about 4000 feet above sea-level. During the several years that I was in the Protectorate I can never remember, while at Entebbe, which is actually only two or three miles north of the Equator, a single night all the year round when one did not require to sleep under at least one blanket.

The climate, generally speaking, when compared with many tropical countries, is far from unpleasant, particularly in the dry seasons, of which there are two. Although not definitely defined, these are approximately December to February, and June and July.

Taken all round, the best time of year for shooting is immediately after Christmas until the middle of March. The big rains cease about the middle of October, but the annual grass burning is not fully completed till well on into December. Rain falls again about April, but it is not very heavy at that season.

The Kenya-Uganda railway runs the whole way to Kampala, and consequently it is now possible to make the journey from Mombasa, the entry port of Kenya, to the centre of Uganda, a distance of over 900 miles, in forty-eight hours in luxury and in a thoroughly up-to-date train. This is a very different proposition to the old "safari" caravan, which occupied three to four months.

Uganda can be reached from Europe by three routes:

(1) The sea, either through the Suez Canal or round the Cape; (2) or, via Egypt and the Nile, an exceedingly interesting journey; (3) or by air mail, when, of course, baggage must be limited.

On the whole the old-established route by steamer through the Suez Canal to Mombasa is hard to beat. If the Red Sea passage is not made during the hot months from June to September it is a very pleasant and interesting voyage.

Do not be persuaded into engaging servants at Mombasa, unless under very special recommendation, as servants, and in fact everything required for a shooting trip, can be obtained at Kampala. Above all, have nothing to do with any suggestion to procure in Kenya porters or a hunter (particularly a white one) for work in Uganda. They are better by reason of their local experience and cheaper if engaged in Uganda itself.

Several through trains leave Mombasa for Kampala every week, and the interest of that journey alone is almost worth the trip to East Africa. The wild game to be seen feeding unconcernedly alongside the track, one side of which for many miles is a game reserve, and the scenery, ranging from the plains near the coast to the highlands beyond Nairobi, are a wonderful experience. Whether one finishes the journey by embarking upon one of the miniature liners at Kisumu to land at Jinja or Entebbe, or proceeds overland from Nakuru through Eldama Ravine, Eldoret, Tororo to Jinja, and thence to Kampala, interest never flags.

For a shoot anywhere in Uganda the sportsman is strongly advised to make Kampala his jumping-off place. He will there obtain all the information, and anything else he may require, with more ease and reliability than anywhere else in the Protectorate. If his final objective is the Western Province, Buganda, or Bunyoro he is well on the road to all three at Kampala. If he wished to operate in the Eastern Province or the West Nile, a short rail journey back on his tracks will take him to Jinja. Thence for the West Nile he will proceed by rail to Namasagali, then by steamer to Masindi Port, by Government lorry to Butiaba, crossing from there by lake boat to the Nile's exit from the north end of Lake Albert. Then up the river by boat to Rhino Camp, and by motor lorry to Arua, the headquarters of the Nile Province.

There are hotels or rest houses at all the big stopping-places.

On arrival at Kampala the sportsman is advised to go as soon as possible to the office of the District Commissioner for help and advice. Should the D.C. be himself not personally acquainted with the particular locality in which the hunter proposes to operate, he will be able to put him in touch with some reliable person who does know and can advise him.

Although hunting game from motor cars is strictly prohibited, it will probably be found that that means for transport can best be employed in the initial stages of the journey.

A motor lorry or box-car which will carry oneself and the whole of one's gear can be hired or even bought very reasonably in Kampala.

Although it is essential that a new-comer should have men among his servants who talk English, it is strongly advised that he should set himself at once to try to learn a few words of Swahili. A very small vocabulary only will be necessary for the purposes of a shooting trip. This knowledge will not only be useful when out stalking with raw natives, but will also give him a certain prestige in camp and will make him not so absolutely at the mercy of his servant's translations.

For everyday use, when talking to people to whom Swahili is as much a foreign language as it is to a European, a knowledge of some five or six hundred words is ample. For the duration of a shooting trip a couple of hundred carefully selected words should suffice and will make a great difference to the comfort and enjoyment of the visitor.

As the success of a shooting expedition must unquestionably depend

entirely upon the relations existing between the hunter and his followers, it will not be out of place to deal with that point here.

It is just as important for a native hunter to know that he can rely upon his employer as much for fair dealing as that he will keep his head in an emergency, as it is for the white man to have an equal confidence in his hunter. Likewise, to get the best out of one's porters it is as well to let them realize from the start that you are their friend as well as their boss and are concerned for their welfare. The African is a most amenable creature, and an European can chat to and even on occasion "rag" them without any loss of dignity or discipline. Let your porters find out—and the sooner the better—that you mean to play the game with them, but at the same time do not intend to stand any nonsense, and they will do anything within reason you may require of them. With a few exceptions, now unfortunately more common with the advance of civilization, implicit faith in the ability of the white man to achieve anything, human or superhuman, is inborn in the native met with in the Protectorate.

If really called upon and travelling light, that is with loads of approximately not more than fifty pounds each, your native porter will think little of covering up to 25 miles in a marching day of seven to eight hours, including halts. He is quite content to travel with the sun well up the whole time and takes his meal after arrival in camp. Unless camp is pitched in uninhabited country, or the headman of the place is truculent, a very rare occurrence, the porters' evening meal, which is usually the only one of the day, is provided without any need for arrangement by the employer.

While most natives of the Protectorate are not normally meat eaters, they dearly love to make the most of a meat ration when it is forthcoming. Sometimes, in fact, they make too much of it, and if meat is plentiful it behoves their employer to see that the individual ration is not too large, as too much of the unaccustomed diet can have very disastrous effects.

Some Uganda tribes will eat the flesh of Elephant, but many do not, but they all seem to relish Hippo meat and will travel a long way to procure it. After shooting Hippo by the shores of Lake Victoria, miles away from anywhere, and long before the dead animal has reappeared on the surface of the water, a process which usually takes about four hours, hundreds of natives, men, women, and children will have assembled by the lakeside, eager to lend a hand in hauling it ashore, and cutting it up. In an incredibly short space of time nothing is left but the skeleton.

Do not forget to carry a good supply of Epsom salts besides quinine for your servants' and porters' use when on trek in Uganda. They are liable to malaria, but their most common ailment is the result of an overdose of meat with the usual after-effects of gluttonous feeding.

As to your own health, that has been dealt with in the Medical chapter. But Uganda is by no means an unhealthy climate as long as reasonable precautions are taken, especially as regards sunstroke and malaria.

Two important tips are: do yourself well and don't stint luxuries unnecessarily, and avoid strong liquor, especially spirits, until after sundown. The recommendation regarding living well is not meant to suggest that one should live luxuriously, or to go to the other extreme and live too simply. Let the food you eat be of good quality and the cooked food really well cooked.

There are many very good native cooks to be found in Africa, but they are not to be found for the wage of a few shillings a month. The best perhaps are Goanese, but these can seldom be recommended for safari. The great essential of a cook on trek is that he should be able to make good bread and this should be seen to before the start, as well as the fact that he has a supply of whatever particular "yeast" he fancies.

CAMP OUTFIT PARTICULARLY APPLICABLE TO UGANDA

Personal tastes and requirements must of necessity enter very largely into the question of what is most suitable in that respect, but to anyone unacquainted with the climate of the country, and other prevailing conditions, some at least of the following hints or suggestions may prove useful.

Mention has been made elsewhere of the variations in the local temperature during the twenty-four hours. Even on the west bank of the Nile, north of Lake Albert Edward, where the daytime is usually the hottest to be found in the whole Protectorate, the nights and early mornings can be intensely cold.

For general purposes outer garments of the texture of light tweeds or flannels are most suitable. A jacket put on for the earlier stages of the day's march can always be taken off and attached to a porter's load, or be carried by a tracker, but if and when this is done the warning, stressed elsewhere, regarding adequate covering for the spine, should be borne in mind.

Personally, when on safari, I usually wear shooting jackets, Norfolk pattern, and very loosely cut, made of russet-coloured coarse-woven cloth of the texture of fine sacking.¹ This very soon weathered to a most useful protective colouring for the average shooting grounds in Uganda, but beneath this I invariably wore, in addition to an India gauze vest as a sweat absorber, a locally made "bush" shirt of khaki drill with a detachable spine pad. This pad was made of two or three thicknesses of drill six or seven inches wide, cross-stitched and attached by a button on each shoulder and two more also on the shirt to secure it just below the tops of the breeches.

If you roll up your sleeves be careful of sunburn until your arms are properly hardened.

For some reason many Europeans take a tremendous delight in wearing "shorts" in the tropics. The practice is so popular that there must be some advantage in that type of garment, but I have never yet been able to appreciate it. On the other hand, there certainly are circumstances under which they must be anything but an advantage, namely when mosquitoes and other biting insects are about, or when stalking through thorny or grass country, whether the latter is burnt, dry, or green.

Personally I invariably use breeches for "field" work, and have worn the thickest of corduroy-velvet riding-breeches in East Africa and the even more trying climate of West Africa all the year round, both for walking and riding, without the slightest discomfort due to their weight, and feel sure that I owed a considerable amount of protection to that same reason. But most people prefer loose trousers tucked into canvas leggings.

¹ I prefer "Solara" cloth and one or more woollies.

Covering for the legs below the knees is, again, a matter of personal taste; some prefer kneeboots, others gaiters, while puttees appeal to many. I always wore either field-boots, waterproof to their tops, which were useful when operating in marshy ground or working in canoes, or ankle-boots with gaiters of the lace-up and closely fitting variety, made and kept as pliable as cloth. Puttees I have never had much use for, they fray and get torn by thorns, and however well put on can conceivably unwind, and yards—or even a foot or so—of trailing puttee could be very embarrassing when one is in rapid pursuit of quarry, or, even worse still, in more rapid retreat from it!

Foot covering is a very important point. Thickish socks, or two pairs of thin ones worn at the same time, preferably of undyed wool, are the best wear for marching and shooting. If boot soles are of leather they must be studded, otherwise a very little going over parched grass polishes them to such a high degree that sure foothold is impossible. Rope soles are the best if you can get the right sort, as from the Sappers' and Miners' Depot in India, but the cheap variety commonly sold at home are useless as they wear out in no time. Rubber soles would answer the purpose equally well and are procurable anywhere.

At least two pairs of stout boots should be kept in soft condition by whatever kind of grease the wearer prefers, neatsfoot oil is hard to beat for that purpose, and it is a good plan not to wear the same pair on two days in succession.

A pair of shoes soled with thick rubber to change into on return to camp are useful, but be careful of snakes if you are likely to stroll far from camp, although I saw only three snakes in all my time in Uganda.

A good stout pair of slippers is a useful addition to the kit if only for the purpose of stepping into when getting out of bed or bath as a protection from jiggers.

Mosquito-boots are of course almost indispensable. Some travellers indulge in the luxury of the "camel-boot" variety which can be pulled up over the thigh, but the ordinary Wellington-boot pattern, tying with a lace below the knee and made of canvas or, preferably, soft leather, meets the case admirably.

Light-weight undervests ought always to be worn, India gauze, wool or a mixture of silk and wool are all quite useful, but silk alone is not recommended. To wear a linen or cotton shirt next to the body either by night or day is a risk which is not worth taking.

The pattern and material for pants is also a matter of personal taste, I never wore anything but cotton or linen knee-length drawers.

It is quite unnecessary to take out a large supply of underclothes and shirts as, even though one ordinarily puts on a clean vest, etc., every day, laundering is done by one's domestic staff, also usually daily. For this purpose a small box-iron and supply of washing-soap should be included among stores.

Unless one normally wears a body (or cholera) belt do not adopt them merely because you are going to a tropical climate, once taken to they apparently have always to be worn and must be a considerable nuisance and are probably far from comfortable.

Silk handkerchiefs are quite useless for mopping up perspiration, a supply of cotton or linen ones should therefore be included in the kit.

The old pattern "Wolseley" helmet is probably the most uncomfortable type of tropical headgear imaginable. For every-day use the khaki pith topee (Cawnpore Tent Club pattern) is hard to beat. Tropical headwear is not required west of Port Said, and every variety of helmet, topee, or hat can be procured much cheaper at that place than in this country.

The clothing question cannot be left without emphasizing the absolute necessity of including evening-dress clothes in one's kit, which can be left at base or starting point. At any station of any size in East Africa a dinner-jacket suit is certainly required. This applies equally to the voyage.

Jaeger sheets are a luxury and last practically for ever. On safari in Uganda I always slept in a Jaeger "flea-bag," but a spare blanket or two, Army pattern, should be taken for use in Uganda.

While on the subject of beds, however, make a point of always insisting that your servant makes up your bed for the night, which includes letting down and very carefully tucking in your mosquito-net all round, before sundown. If this is left to be done till night has fallen there is every chance that a mosquito or two will be tucked in on the inside of the net at the same time.

A practice I always followed on safari was to have my bath as soon as possible after reaching camp (provided, of course, that I was not going out again), even if this occurred as early as the tea hour, after which I donned pyjamas, putting my shirt, trousers, and coat over them, so that on going to bed the outer garments could either be removed under cover of the mosquito-netting, or, if taken off outside, one could slip quickly under the net without giving the mosquitoes an opportunity of attacking one while in the "buff."

Weapons are also the subject of a special article, but do not forget that rifles of .303 calibre cannot be imported into Uganda without special permission.

It goes without saying that field-glasses are an absolute necessity. The pattern of these must be left to individual taste, but those with a very high magnification often defeat the purpose for which they are required.

M E D I C A L M A T T E R S

By DR. H. L. DUKE

Note.—Further medical information will be found in pp. 65-68

The sportsman who intends making an expedition into the wilds of a tropical country must take with him a supply of useful drugs, both for himself and for his porters.

It would be superfluous here to suggest a comprehensive list of drugs for his medicine chest. Suffice it to insist on a good supply of powerful pills, with which to drive out the snakes and evil spirits that from time to time enter in along with excess of meat, and upset the internal economy of the native carrier; and also several pounds of cotton wool, lint, and

boracic preparations for ulcers, cuts, and sore feet. The pills must contain no mercury, as natives in this part of the world are very susceptible to this drug.

A useful remedy for the large and indolent ulcers which are so common on the shins of porters, is pure glycerine applied on lint; a saturated solution of salt in water, used in the same way, is also often effective in persuading the ulcer to heal up. See that all your carriers have something on their feet to protect them from injury while carrying unaccustomed weights over bad ground. A few Water Buck, or better still, Buffalo skins will suffice for the whole safari, and the headman can be made responsible for the distribution of adequate portions to each man.

A common complaint of the porters is "fever," usually accompanied by headache. A pretty sure sign of genuine suffering will be the marks of recent cupping on the head, usually on either side of the occiput. Natives almost always resort to this little operation for the relief of headache. A purge, 10 grains of aspirin, and 10 grains of quinine often work wonders with such sufferers, but they must be watched and rested until free from fever. There are three afflictions of which the white traveller in Uganda must beware. They are not peculiar to the Protectorate, but are essentially tropical diseases, and as such they call for a few words of explanation and advice. These are chiggers, malaria, and tick fever.

Chiggers.

Chiggers are a great nuisance to the barefooted native in Uganda, but with common cleanliness and care the trouble they cause must be described as essentially a "minor ailment," and they are easily controlled. Certain rest camps are infested with chiggers in spite of the protestations of the native attendant that all that human ingenuity can devise has been done to exclude them. Never walk about with bare feet, and where you have reason to suspect the presence of these insects, avoid slippers and shoes and stick to boots. Any irritation of the feet should at once suggest the arrival of a chigger, and you should call your boy to confirm the diagnosis and, if necessary, to extract the intruder. It is advisable to pass the safety-pin, which he will select for the operation, through the flame of a match before allowing him to start work. A fairly blunt pin is better than a sharp needle. After the extraction of the insect and its belongings, anoint the cavity with antiseptic and put on a piece of lint.

The sportsman must take every possible care of his own and of his porters' feet. He should instruct the headman to supervise the men in this respect. Some natives are incredibly careless and filthy where chiggers are concerned. If neglected the infected feet get into a terrible state; considerable deformity may result, and such a man is, of course, a source of infection to others.

Malaria.

The parasites of malaria are conveyed from man to man by anopheline mosquitoes. These insects are, on the whole, smaller and much less obtrusive in their methods than are the culicines. An anopheline will start operations with a thorough inspection of the feet and ankles of its selected victim, and will gradually prospect upwards into the more sensitive and therefore dangerous regions of the head and neck. Often

enough its stealthy and almost inaudible flight enables it to feed quite unperceived, while its clumsy cousin, humming noisily round the back of your neck, meets with rebuff and probably disaster.

In certain parts of Uganda, especially along the Victoria Nile, I have spent the evening by the camp fire quite undisturbed by mosquitoes, only to find that the tent was full of tiny anophelines which kept up a continuous high-pitched song all night, and, in the morning, hung in uncountable numbers from the roof and between the flies of the tent.

Many men laugh at intelligent personal precautions against mosquitoes. What the eye does not see the brain does not worry about; and provided that the insects do not get into their mouth and eyes during meals, and as long as the gutters of their houses are inspected by the malarial gang every few weeks, many people are prepared to take their chance and trust to luck. They will sit about in light clothes from sunset until dinner-time, while the few mosquito habitués of the place take their fill through the chair seat or, in luxurious ease, off knee or ankle; and then return home to storm and rage against the boy who leaves a window unfastened in a house, the back door of which is chronically open until bedtime.

These people imply, directly or indirectly, that all the hardened hunter needs as protection against mosquitoes is a net to sleep under. But these same Spartans are a poor advertisement for the *laissez faire* policy when, after repeated consignments of malaria parasites have thoroughly established themselves in their systems, little "goes of fever" and spells of "cheapness" or whatever they may call their symptoms, proclaim their defeat and point to blackwater fever as a possible reward of their hardiness. Prevention is vastly better than the cure of malaria. Concentrate your intelligence, while you are on safari, on preventing mosquitoes from biting you, and you will escape both the fever and the quinine. Let your mosquito boots reach well above the knee, and protect yourself by wearing a light raincoat or dressing-gown between sunset and bedtime. Remember that a mosquito can easily bite through a single layer of cloth, unless it be some special proofed material. What is more, the tiny proboscis can get through two layers of material, provided they are stretched tight and do not move on one another.

In bad districts you must feed under a dining-net.

Have your bath, when possible, before the sun is down, and once in bed see that no part of your body rests against the net. While dressing in the morning keep a constant look-out for cunning attacks from under the bed and from your blind side as you stand dressing, and get out of the tent with the least possible delay. The question of the taking of prophylactic quinine I prefer not to broach here. The matter is controversial and views differ. The sportsman should consult the medical man on the spot.

The best way of escaping fever is to prevent the mosquito that carries it from biting you, and this is a side of the question that most people treat with the most extraordinary carelessness and inconsistency.

Tick Fever

Tick or spirillum fever is an exceedingly unpleasant disease, which is carried by the Spirillum Tick, *Ornithodoros moubata*. From the point of view of the visiting sportsman it is a more serious complaint than malaria.

The tick is found in native houses and in old rest camps. When once a

building is found to be tick-infested it should be burnt down, as it is practically impossible to sterilize it. But it is, unfortunately, a difficult thing to detect the ticks, unless someone is bitten or happens to find one on his clothing. Moreover, it by no means infrequently happens that a man develops tick fever without being able to say with certainty where he became infected. The greatest care should be taken, even in the cleanest rest camps, to avoid sitting about after sunset in the "banda," as the shelter is styled. Of course, if the camp has just been erected, there is no danger, but it is surprising how easy it is for porters to introduce ticks into a new camp.

The insects crawl on to baggage, and on to porters' personal loads, and thus are transmitted great distances.

It is an excellent rule never to sit down in a native hut, and not to allow your porters to use old habitations for their lodging, as they are very prone to do in order to escape the trouble of building temporary shelters.

On the march, also, none of your loads should be put down in native huts while the carriers are resting; and the same applies to the resting-places so often found under convenient roadside trees where native travellers sit and rest on their way along the roads. The tick is exceedingly difficult to kill, and can survive for long periods without any food. Direct sunlight is, however, soon fatal to the insect, and this fact is of great practical importance.

UGANDA (Continued)

CHAPTER TWO

THE COUNTRY & ITS GAME

By DR. H. L. DUKE

IT is with grave misgivings that I approach the task of writing an account of big game hunting in Uganda. To present a true and adequate picture would tax a freer pen, and exhaust a wider experience than mine.

It so happens, however, that during twenty odd years spent in the country it has been my pleasant lot to cultivate a fairly close acquaintance with its big game animals.

After all, the most experienced hunter in the world must have local knowledge behind him if he is to get the full benefit out of a shooting trip in a thick country like Uganda. The missed opportunity seldom recurs, and it is exasperating to a degree to learn, when you have got back from your shoot, that lack of local knowledge has led you to miss some interesting beast, such as Giant Pig or Klipspringer, through whose haunts you have just passed in blissful ignorance of its existence. Such things do happen. I have known district officers, keen sportsmen, too, who were ignorant of the presence of certain animals in their area—what chance, then, has the casual visitor?

And now, before proceeding any further, it will be well to give the reader an idea of what I hold to be the philosophy and creed of the true sportsman.

With the modern rifle death can and should be a swift and relatively painless affair, and it is up to the sportsman to see that whatever killing he deems necessary be done in as humane a manner as possible. It is bad enough to kill at all, but it is downright cowardice to abuse the overwhelming superiority conferred on the modern hunter by his rifle.

And so we arrive at the first great maxim for the big game hunter—*Never cause unnecessary pain to the quarry; do not hit your opponent below the belt.*

The shorter the range the easier becomes accurate shooting; and it is just this shortening process that is the essence of skilful stalking—that hallmark of the best type of hunter. As to killing, and its justification, there are times when conscience rises up and deals us a nasty thrust. What properly constituted hunter but has felt the twinges of remorse as he looks down at the beautiful creature that he has so deliberately destroyed?

There are, alas, white men who seem to kill for the sake of killing; who will take ridiculous shots at impossible ranges, rather than get down

to a bit of honest stalking; who "brown" the herd, and let a wounded animal creep away to die in misery. Such people have no more claim to the title of sportsmen than attaches to the possession of a rifle and a licence to shoot. Let the novice be warned in time, lest the excitement and novelty of his surroundings redden his vision and lead him to follow their example.

A good head is worth a dozen poor ones; and you can get every bit as much enjoyment from looking at your beast in the finder of your camera, as you can along the barrel of your rifle.

From the sportsman's point of view, Uganda is, *par excellence*, the home of the Elephant and the Buffalo. Hundreds of square miles are covered with elephant grass or with forest. This thick country constitutes an almost impregnable stronghold for the great beasts. Even in the populated districts of Buganda proper, from which Elephant have long since disappeared, there are little herds of Buffalo, sometimes fifteen to twenty strong, which, from year's end to year's end, are practically unmolested by human beings. Occasionally a game-pit claims a victim, or some fortunate and energetic European, after days of patient labour, brings a beast to earth. But for months at a time these little bunches neither see nor are seen by man.

Further afield, in the less populated thick country of Bunyoro and Toro, miles of undulating slopes, clothed with "neat" elephant grass and intersected by little papyrus swamps and belts of forest, separate the scattered villages. Here the only tracks are those of Pig, Elephant and Buffalo.

One must spend an hour or two toiling behind Buffalo in the broiling sun, properly to realize the full horror of the "ebisagazi," as the Baganda call the giant grass.

Anything up to twenty feet on either side of the track tower impenetrable masses of ribbed stems and sharp-edged leaves, all covered with nasty little spicules which penetrate your skin and are most difficult to remove. Showers of debris fall into your eyes, and down your shirt. The heat is terrific. What with canes snapping at every step, leaves scraping across your face and helmet, the constant stepping knee-high over matted masses of reeds left by old fires—such a passage is a veritable torture. And over all presides the nagging uncertainty as to what the Buffalo are thinking of all the commotion.

Elephant are, of course, much easier to follow under such conditions. But the constant twisting of the tracks of big animals, feeding leisurely along preparatory to lying up for the midday siesta, makes it very difficult to cope with the wind. Once the intruder is discovered, the issue depends largely on the temperament of the animals. The hunter can do nothing but keep still and hope for the best.

In my experience, the horns of Buffalo from this elephant grass country seldom exceed 36 inches, which is, after all, a poor sample of this magnificent trophy.

On the whole, therefore, it will be better for the sportsman to look for his Buffalo in more open country, and to keep clear of elephant grass areas except in so far as the pursuit of Elephant compels him to visit them.

Elephant hunting must be looked upon as Uganda's main offering to the sportsman. To get a good Elephant these days, you must be prepared to sacrifice everything to the attainment of that end, and, what is more, be prepared for disappointment.

As a rule, big tuskers are found in the thickest country, where there is little temptation to worry about other game. The less you advertise your visit the better, by wandering around letting off a shotgun at Guinea-fowl and other dainties.

Broadly speaking, there are three main types of country prevailing in Uganda, each with a more or less characteristic fauna.

A brief consideration of these will reveal the different game animals to be found within the Protectorate.

(1) The undulating elephant grass country referred to above, in which, besides Buffalo and Elephant, Bush Pig, Bushbuck and frequently Waterbuck may be found. In the parts of Toro and Bunyoro where it occurs, the Giant Pig feeds out into this type of country from its home in the thick forest.

(2) Heavy timber forest, the biggest tracts of which are the Mabira, the Budongo and the Bugoma, and the little-known Maramagambo Forest of western Kigezi. Here may be found Elephant, Buffalo, Giant and Bush Pig, Forest Duiker, Colobus Monkey, Chimpanzee and Leopard.

(3) Open short grass plains and downs of poor and shallow soil supporting thorn and other bush, sometimes thick and almost impenetrable, but more often permitting fairly comfortable hunting.

Here are included what I have termed below the good shooting grounds, and it is here that the greatest variety of game is obtained. This class of country is, of course, best for the sportsman in February, March and April, after the fires of the hot season. The following game animals may be found: Elephant and Buffalo (especially in the rainy season), Waterbuck, Eland, Impala, Zebra, Jackson's Hartebeest, Topi, Uganda Kob, Reedbuck, Oribi, Bushbuck, Wart-hog, Rhino, Giraffe, Lion, Leopard, Duiker, Hyena and Hunting Dog. A group of interesting animals—Oryx, the two Kudus and Grant's Gazelle—is confined to the remote and loosely administered portions of the Eastern and Rudolf Provinces, and hardly comes into the list of game likely to fall to the sportsman in Uganda.

BUGANDA PROVINCE

Comprises a great deal of thick country, elephant grass and forest. Principal shooting grounds are as follows:

(1) *Masaka District*.—In Mawogola, Kabula, and especially in Buddu counties. Buddu includes most of the Impala country of Uganda.

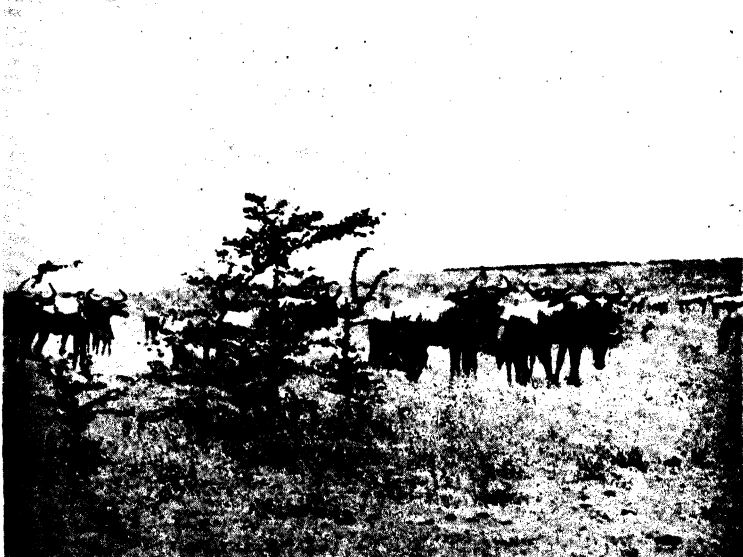
Game.—Elephant (some fine tuskers have been shot in Buddu), Buffalo, Hippo, Lion, Eland, Zebra, Waterbuck, Topi, Uganda Kob (rare), Bushbuck, Reedbuck, Oribi, Duiker, Situtunga, Wart-hog, Pig, Leopard and Hunting Dog.

Administrative Centre.—Masaka, 83 miles by car road from Kampala.

(2) *Mengo District*.—From about 10 to 12 miles to the north of Bombo, the military headquarters, northwards to the Kafu River.

Game.—Same as in the Masaka district save that Kob are very plentiful; Jackson's Hartebeest replaces the Topi; Eland are not very numerous, and Impala, and as far as I know, Wild Dog, are absent.

Administrative Centre.—Kampala, whence an excellent metalled road extends as far as Nakasongola, 73 miles away to the north. From Nakasongola to the Kafu River, in the neighbourhood of which the best shooting



Plates 79—80

EAST AFRICAN GAME.

Top. DEFASSA WATERBUCK

Bottom. BLUE WILDEBEEST.

BOTH OF THESE SPECIES ARE COMMON BEASTS, AND WILL BE SEEN DAILY
IN LARGE NUMBERS IN THEIR OWN HABITAT.

is to be obtained, is 35 miles by a good cart road. Tsetse may be met with in the bush near the Kafu.

(3) *Mubendi District*.—Mostly elephant-grass country. Along the shores of Lake Albert there are short grass plains, but they are for the most part in the closed sleeping-sickness area. Short grass occurs also along the Katonga River to the south, but the game in this locality is the same as that found in northern Buddu, only less numerous.

Game.—Principally Elephant and Buffalo; Lion occur in places, but are seldom seen. In the extreme north of the district Giant Pig are found.

Administrative Centre.—Mubendi, 104 miles from Kampala. A government motor van service plies along this stretch.

(4) *Entebbe District*.—Includes the Sesse Islands, on which Situtunga occur in ever-diminishing numbers. The Lake shore area is, however, as yet closed to sportsmen, save under special permit.

Though a few localities near the Lake in Mawokota County and a small part of Gomba County admit of a little shooting, this district may at once be ruled out for our purposes—always excepting the Situtunga swamps, of which more will be said later on.

In Gomba a few Impala occur, but no good heads, such as may be found in Buddu, across the Katonga River.

EASTERN PROVINCE

Mostly very thickly populated by natives who are keen hunters and skilled at driving game.

The only town worth the name in this province is Jinja, on Lake Victoria. From here a railway runs to Namasigali on the Nile below the rapids, whence a service of stern-paddle steamers and lighters runs to the various ports around Lakes Kioga and Kwanja, and along the Nile to Atura, near the Foweira Rapids. Included in these ports is Masindi Port, whence a motor van runs through Masindi station to Butiabua, on Lake Albert. The principal shooting grounds are:

(1) *Bukedi District*.—Densely populated; game scarce, except in the north in the neighbourhood of the Siroko River, where Roan, Oryx, Grant's Gazelle, Rhino and Giraffe are found.

It is rumoured that Bongo occur on Mount Elgon, but I am not aware of any trustworthy evidence on this point.

Administrative Centre.—Mbale, reached by road from Jinja (94 miles), which crosses the Mpologoma ferry, or by steamer to Mjanji Port, from which 62 miles of excellent metalled road runs up to the station.

(2) *Lango District*.—Flat country with numerous outcrops of gneiss rocks, seldom extensive enough to be called hills. Giraffe (few), Rhino (many), and Uganda Kob occur on the Namasale Peninsula, between Lakes Kawania and Kioga. The Rhino have poor horns, and as the peninsula is infested with anopheline mosquitoes, the sportsman must take every possible precaution against fever. Roan occur near Abako, along the Maroto River, and on the upper waters of the Toshi; along the Sudan border Greater and Lesser Kudu are found.

The population of this area consists of hunters and the district will probably disappoint the visiting sportsman. It is, however, the best place in Uganda to obtain Rhino.

(3) and (4) *Lobor and Karamoja Districts*.—Are as yet unadministered, and are not eligible to sportsmen. The game fauna of these districts, together with the Rudolf Province, resembles that of Kenya Colony rather than of Uganda proper.

WESTERN PROVINCE

A large portion of this province affords excellent shooting. Besides the certainty of finding a fair number of species, there is a possibility of obtaining really valuable trophies in this province. There are three districts—the old native kingdom of Toro, and Ankole and Kigezi.

(1) *Toro*.—Comprises great tracts of elephant grass, much forest, the extensive short grass plains around Ruwenzori and the Semiliki River, and a certain amount of scrub.

Along the base of the mighty mass of Ruwenzori, from the Hima River almost to Katwe at the head of Lake Edward, is the country of the splendid race of Waterbuck from whose ranks the record heads are obtained. Horns measuring 40 inches have been recorded. The plains below the mountain swarm with Uganda Kob and Reedbuck. Lion, Buffalo, Elephant, Leopard, Hyena, Bushbuck and Harness Antelope also occur.

In the Semiliki Valley, which is partly game reserve and partly closed sleeping-sickness territory, is found the slender-tusked Semiliki race of Elephant, whose ivory makes a beautiful trophy but is, commercially, of relatively little value on account of its brittleness; there are also Buffalo, Jackson's Hartebeest (a few), big Waterbuck and Reedbuck, Wart-hog, Kob and Hyena. The Buffalo in this valley are interesting in that red individuals are by no means uncommon; possibly at this point the little red Congo and the big black races interbreed.

Above the Semiliki escarpment, in the elephant grass and forest country, Giant Pig, Elephant and Buffalo are common.

Administrative Centre.—Fort Portal, situated near the foothills of Ruwenzori at 5200 feet above sea-level, one of the most beautifully placed stations in the Protectorate. It is 202 miles from Kampala, the road being already metalled all the way to Fort Portal. Mbarara is 105 miles distant.

(2) *Ankole*.—Mostly wide, undulating short grass pasture lands, sparsely studded with low-growing acacia and other small trees. In the eastern part of the country elephant grass appears. The Buffalo in the neighbourhood of Mbarara are noted for their fine horns. The late Mr. F. A. Knowles' 53½-inch trophy came from this region, and was at one time the record in Rowland Ward's list. On the old German border, in Bukanga County, are numerous Impala and Eland; also Lion, Topi, Zebra, Reedbuck, Oribi, Wart-hog and Wild Dog. In the hills of this region Klipspringer are fairly common. Just across the Kagera River, which forms the boundary between Uganda and Tanganyika Territory, there are numerous Rhino; also a fair number of the so-called East African race of Roan Antelope, whose horns do not exceed 30 inches in length. Still further south, in the Bukoba district of Tanganyika Territory, near the Belgian border, are sable Antelope—the so-called East African race, with horns up to 40 inches. In the Kagera River there are numerous Hippo. In the picturesque crater-lake country to the north-west of

Ankole are numbers of fine Waterbuck, and the plains around the Kazinga Channel swarm with Kob and Reedbuck; many of the streams and lakes of this region abound in Hippo, and Buffalo and Elephant occur throughout the district.

Administrative Centre.—Mbarara, 125 miles from Kampala via Masaka, which is 42 miles away. Road passable for cars except in the rains.

(3) *Kigezi District.*—Comprises the interesting volcanic region with portions of Mounts Muhavura (13,547 feet), Mgahinga (11,400 feet), and Sabinyo (11,960 feet), all extinct volcanoes; also a part of Lake Edward, the small Lakes Bunyoni and Mutanda, the little-known Maramagambo Forest and the plains about the south-eastern shores of Lake Edward. The flat lands adjoining Lake Edward, including Butumbi and Kivumbo, offer excellent shooting, but are, in part at least, in the closed sleeping-sickness' area. Buffalo, Elephant, Waterbuck, Reedbuck, Topi, Lion, Leopard and Wart-hog are found. In the bamboo forest, which clothes the slopes of the volcanoes, there are a fair number of Elephant, and Gorilla are by no means uncommon.

In the bamboo and on the bracken and bramble-clad hillsides a red Duiker is common, but is difficult to shoot. A yellow-backed Duiker has recently been obtained from the forests of this district by Captain J. E. T. Phillips, and sent to the South Kensington Museum for identification; also a new genus of frog-eating Otter from Lake Bunyoni. Bushbuck are common, and Hippo are found in some of the smaller lakes. Lake Bunyoni is remarkable for the absence of Hippo and of fish. The valleys of the hill districts of Kigezi are shrouded in dense mist until 8 or 9 in the morning, and the nights are extremely cold. Extra blankets for both the hunter and his attendants are essential.

The papyrus swamps, which fill some of the valleys near Ngezi, on Lake Bunyoni and Nkumba hill, hold large numbers of Situtunga, but I know of no big heads from this district. The rumoured existence of a true pygmy Elephant in the bamboo forests of the volcano region is not supported by any satisfactory evidence.

Administrative Centre.—Kabale, 95 miles from Mbarara; road good.

NORTHERN PROVINCE

Includes excellent shooting grounds, as well as a great deal of dense elephant grass country.

(1) *Bunyoro District.*—A great Elephant area. There is excellent shooting on the plains along Lake Albert, below the escarpment, accessible from Hoima or Masindi, and also in the open short-grass country along the Kafu River to the south, though there is not much variety of game. The Bushbuck on the plains about Lake Albert used to be remarkable for their long horns, more than one head of over 18 inches having been recorded; but the rinderpest of 1917-18 hit them hard, and it is doubtful if many have survived. A small variety of Bushbuck, of darker colouring and with more definite white markings, is common on these plains, and is known in Uganda by the name of "Harness Antelope." In my experience, the horns of the adult Harness Antelope are always white-tipped, in contrast with those of the more common kind of Bushbuck of the Protectorate. The native name is, however, the same for both. Buffalo are still common

throughout the Northern Province. The plains about the Kafu River are remarkable for enormous numbers of Uganda Kob, and good heads have been obtained here.

The Game Reserve of Bunyoro, including the Chopi country lying in the bend of the Victoria Nile, probably contains most of the big Elephants left in Uganda. From here they may wander down during the rains to the more open country near the Kafu, or towards Lake Albert. The elephant grass in Chopi and the Reserve must be seen to be appreciated, and hunting therein is trying work. The scrub between the Kafu and Masindi station is a morsitans belt, and tsetse are to be found all through the Bukungu country along Lake Albert and the Victoria Nile, below and above the Murchison Falls.

Administrative Centre.—Masindi, which is connected by motor van service with Masindi Port on the east (29 miles) and with Butiabua on the west (47 miles).

Hoima, where there is an Assistant Commissioner, is $34\frac{1}{2}$ miles from Masindi, and is also connected by good roads with Kampala, Fort Portal and Mbarara. Hoima stands in thick elephant grass country, and it was quite near this station that Captain E. B. Place shot his 179-pound tusker.

Two big areas of forest occur in the Bunyoro district, the Budongo, between Masindi and Lake Albert, covering some 160 square miles, and the Bugoma on the confines of the district about 80 square miles in extent. Giant Pig are common in these forests, and Chimpanzees are by no means rare; the former are found throughout the country between Hoima and Fort Portal and the Semiliki escarpment. Elephant are numerous, and Colobus Monkeys are common in all the forests.

(2) *Gulu District.*—The Lelwel Hartebeest—of which Jackson's Hartebeest is said to be a separate race characterized by the absence of the Lelwel's black face-blaze—is found in this district.

The Gulu district is chiefly interesting on account of the possibility it affords of getting a big Elephant. The best shooting-grounds are in sleeping-sickness territory.

Administrative Centre.—Gulu, 83 miles from Masindi, the road being interrupted by the Victoria Nile at Atura Ferry.

(3) *Chua District.*—On the whole a poorly watered, low-lying, thorn-bush country. Here again, Elephant and Buffalo are the main attraction for the sportsman.

Administrative Centre.—Kitgum, 35 miles from Gulu.

(4) *West Nile District.*—The chief interest of this district for the sportsman consists in the occurrence within its limits of the White Rhinoceros. This carefully preserved species lives in a strip of light bush country extending for some 35 miles along the west bank of the Nile, to the south of Nimule, and some 40 miles inland.

Along the Sudanese border there is a possibility of meeting with the Giant Eland, which is found in the neighbouring Sudanese territory. Roan also occur along this boundary. In the neighbouring Ouele district of the Belgian Congo the White Rhinoceros is said to be not uncommon.

Administrative Centre.—Arua, situated $44\frac{1}{2}$ miles from Port Mutir on the Bahr-el-Gebel or White Nile. The steamers to and from Butiabua touch at Port Mutir.



ELEPHANT
A HERD OF COWS AND CALVES AFTER DRINKING IN THE RIVER BED.

RUDOLF PROVINCE

Consists largely of thin thorn scrub, running into the almost grassless wastes of Turkana. As already mentioned, the game fauna of this province is peculiar and approximates to that of Kenya Colony. Elephant, Giraffe, Rhino, Zebra, Eland, both the Kudus, Roan, Oryx, Hartbeest, Waterbuck, Topi, Grant's Gazelle, Bushbuck and Oribi are all found, the best shooting country being around Mounts Jic, Moroto and Debasien, and in the Magosi Hills. The province is, however, very unsettled, and it is doubtful whether the sportsman will be able to obtain sanction to visit this area, for the present, at any rate.

ELEPHANT.—I started after my first Elephant full of confidence, and convinced of the simplicity of the task. I shall never forget the disillusionment that followed.

Accompanied by a well-known native hunter, I was looking for signs of Giant Pig in one of the big forests of Bunyoro, when a faint trumpeting from somewhere in the elephant grass outside proclaimed the presence of a herd of Elephant in the vicinity. The approach to the herd, whose exact position and size we could only guess, led through what I call "neat" elephant grass, stiff 20-foot growth, unhampered by annual burnings. Leaving the forest, we started off on hands and knees along a convenient Pig track. Swarms of bloodthirsty *Hæmatopota* flies hung about the track, and at once got to work wherever skin showed bare. We had painfully negotiated some 50 yards of our journey, when an appalling upheaval a short distance ahead announced the departure of the herd—to my intense relief.

We had just started back, a little carelessly perhaps, thinking that the Elephants had all gone, when a combined trumpeting and smashing of canes warned us that one at least was made of sterner stuff and had decided to look into the matter.

At this juncture the native hunter pushed past me and disappeared, crashing his way back towards the forest from which we had entered the grass. The Elephant paused and then advanced a few steps, trumpeting as he came; no doubt, he heard the man's noisy retreat. I thought it best to lie low and trust to escaping notice in the dense growth. At the point where I crouched, an old Elephant track led off at right angles, and I decided, if he continued his advance in my direction, to cut away down this side track in the hopes of his losing the wind and carrying straight on. Once again came the trumpeting and the crashing sweep of the canes, followed again by dead silence, when he seemed to be calculating just where to go next. He was now so near that I decided to try the side track the next time he got moving. On he came again, and I ran some 20-30 yards along the track and dropped to listen. Down a little Pig path that branched off at the point where I lay I caught a glimpse of a bit of grey foreleg, nothing more, about 20 yards away, motionless and apparently turned in my direction. He began another rush, trumpeting as usual, and I scrambled back along the track and dropped again, feeling exceedingly frightened and homesick. But the storm was over at last, and he charged along right over the spot whence I had viewed him, and on into the forest.

Now I have tried not to allow this single experience to influence me unduly in forming an opinion about Elephants generally. But the impressions acquired during that encounter—the sense of utter helplessness down amongst the roots of that appalling grass, the terrifying trumpeting, the vicious little rushes and sinister pauses, and, at the end, the impression of overwhelming strength conveyed by the glimpse of that great foreleg—have never faded. I do not believe that a whole series of uneventful Elephant hunts would ever alter the opinion then formed about these animals. As a matter of fact my experience of Elephant, Buffalo, Lion and Rhino has impressed me that the Elephant is by far the most dangerous beast to tackle, in Uganda, at any rate. There is something uncanny in this combination of intelligence, bulk, strength and agility. A herd can work through a forest and hardly make a sound, and 20-foot grass is like hay in their path. The enormous ears of the African Elephant add greatly to his grandeur; and it needs a special effort to stand up to one of these beasts, sailing down upon you with ears out and trunk up, unburdening his vicious soul the while in frenzied trumpeting.

Elephants differ from other big game in that they are constantly being molested by man. Either he is hunting them for their tusks, or he is doing his best to drive them away from his settlements.

In British territory, at any rate, the females are protected, and males below a certain tusk weight may not be shot. And so a considerable section of the Elephant community of a district must come to regard man as a puny but repulsive enemy, who is constantly interfering with their innocent enjoyments.

His strange power over the beasts of the field is still acknowledged; but in many districts in Uganda the unmolested and, consequently, somewhat swollen-headed members of the herds evince at times a disconcerting contempt for the lord of creation.

It is an impressive sight, and one that provides food for thought, to see a female Elephant disengage herself from the fleeing herd, and cruise along the flanks with trunk uplifted, trying to catch your wind. She looks so deliberately hostile and threatening, as, after one or two short tacks, she shuffles back into the herd, to be followed, perhaps, by several more ere the column disappears. With the big bulls it is different. It is rare nowadays, in Uganda, to find a big tusker that has not a collection of bullets about his person. Sometimes these old warriors are dangerous. They have survived many a brush with the enemy, and have learnt the value of aggressive tactics. Some of them stand no nonsense, and get to work the moment they pick up your wind.

In Uganda the big tuskers are more commonly found away from the big herds. The natives say that they keep away from the crowd because they get pushed about and annoyed by the young males. And so they go about alone, or, more often, in little groups of two or three, all bulls, together. If left to themselves they may stay for several weeks in a restricted locality, roaming about and feeding during the night and early morning, and spending the hot part of the day in the shade of the forest, or, preferably, under some tree in the thick elephant grass.

From time to time these little groups of bulls join up for a while with larger herds. In case of alarm the big beast will usually be found in the middle of the herd, the line of his back showing above his lesser com-

panions, but with all his vital spots protected; in such circumstances it is often impossible to make an opening for a shot. Once alarmed, it depends upon the extent to which the Elephants have recently been harassed, whether or not you can overtake them.

There are herds in Uganda which have grown so wary that the least inkling of a white man's presence will send them off at a rate that precludes all hope of overtaking them before nightfall. If you have the good fortune to fall in with a big Elephant it is advisable to let your hunters see that you do not mind a little discomfort, and are prepared to dispense with your tent, and camp in the track as occasion demands. One or two loads, say a ground-sheet, a chop-box of essentials and a mosquito-net, are all that are required; and with your tracker, and your two porters a little way behind, you can stride along the Broadway that leadeth to the Elephant without the worry of deciding when to turn and go back to camp. When the signs tell you that you are getting near your beast, send back the porters and let them take cover while you and your tracker proceed to reconnoitre.

In hunting Elephant, an ash-bag is, to my mind, an absolute essential in estimating the direction of the wind. It is not always possible to find suitable material to crumple in your fingers in the approved fashion, and it is imperative in following Elephant to their midday resting-place to have as much exact information about the wind as possible.

You will do well to have a clear understanding with your hunter as to what kind of tusk you want. Big Elephants are becoming rare, and you may have to spend weeks in fruitless search before you fall in with even a 90-pounder.

Elephants rely to a very great extent upon their trunk to detect an enemy. They have a wonderfully keen sense of smell. As to their eyes and ears, my own experience has not revealed much. As often as not one sees the Elephant for the first time just before the shooting begins, and up to that juncture you do not give him much chance for the exercise of any sense save that of smell. The following incident, however, argues poor vision. My tracker had just returned, having, as he thought, located the best of a bunch of three bulls in the act of preparing for the midday snooze. The track lay through dense elephant grass, and I had successfully passed a patch of giant thistle—always a delicate operation when silence is essential—and had reached a tree which had fallen across the track and was lying supported by its stump about $2\frac{1}{2}$ feet from the ground. The Elephant had stepped over this. On looking up, after the concentrated effort of reaching this tree across ground littered with dead thistle leaves, I was astonished to see, about 20 feet ahead, an Elephant lying on his side, with his legs outstretched and his huge stern towards me. From where I was standing his front end was, of course, invisible, and I was wondering how to obtain a view of his tusks when the mass started moving. He was so close that as he found his legs and rose to his full height it seemed as if the great grey form would never stop expanding. Having regained his feet he stood still for a second or two, gently shifting from foot to foot; and then, as if to complete my discomfort, turned, took a pace forward, and stood facing me.

His tusks looked about 40-pounders, and I did not wish to shoot. The suddenness of his uprising and the abrupt turn in my direction for a

moment suggested he was uneasy in his mind. I kept perfectly still and studied the little brown eyes, every detail of which was visible. As he stood there, lazily marking time, their expression was utterly blank. He focused nothing in particular and his gaze wandered round absent-mindedly, resting now on me, now on the ground at his feet, without the slightest suspicion of attentiveness.

Immensely relieved, I had now to retreat before he should take it into his head to start retracing his steps. Suffice it to say that I got back to the trackers without giving the alarm.

Now in stalking Buck with the camera I have several times watched them discover my presence, although for a moment or two before detection I had been absolutely motionless, standing with the wind right, quite unconcealed within 20 or 30 yards of the unsuspecting feeding animal. On each occasion the procedure was the same. During a pause in the grazing the animal's eye would light upon the intruder. For a second or two the jaws would go on munching, and then suddenly stop. The attitude stiffened and the casual glance became an intent stare, the whole pose indicating a visual perception lacking the subtle confirmation by the sense of smell. Similarly with Buffalo: once the beast's eye has lighted on you, you may rest assured that your presence will receive every attention. These remarks, of course, only apply to the behaviour at close quarters. At longer distances it is well known that animals rely far more upon their sense of smell; and the hunter may often walk about in full view of the game without destroying his chances of getting up to them later on, provided he keeps right with the wind.

There are instances of Elephants chivvying men about in the open, like a dog after a rabbit, guided largely, if not entirely, by sight. But in most of these cases the victim had on some strikingly coloured garment which caught the animal's eye.

When Elephants are standing about undisturbed, feeding or dozing without a care in the world to worry them, their bellies give forth strange rumbling sounds which are often of great assistance to the stalker in locating the exact position of a hidden animal. Directly the beast becomes suspicious these rumblings cease, and the ensuing silence is as ominous as the calm before a cyclone. When your Elephant stops rumbling you know at once that you have lost the inestimable advantage of surprise. When once a single animal has located the intruder it takes a remarkably short time for the alarm to spread through the herd, and the best that can then be hoped for is that the beasts will not come your way when they do make up their minds to stampede. It is at moments such as these that one appreciates the danger of venturing into the middle of a herd of Elephant in dense cover. As years go on and big tuskers become more and more difficult to find, the hunter will be obliged to turn his attention to smaller ivory, such as 50 or 60-pounders. Herd hunting will then be more often necessary than at present, and at the same time the Elephants will become more used to man and consequently more prone to attack him.

As already stated, big Elephants are hard to come by. Probably the best place in Uganda for real big ivory is the Bunyoro Game Reserve, though good tuskers are doubtless still fairly common through Bunyoro and Toro kingdoms and in the Gulu district. The great elephant grass areas of Gomba County, in Buganda, should also yield good tuskers.

Two of the biggest tuskers shot by Europeans, namely, Major Powell Cotton's with 198 and 174-pound tusks and Captain E. B. Place's with 176 and 179½ pound tusks, were killed in Bunyoro.

In the Semiliki Valley the Elephants have remarkably long thin tusks, the ivory of which is of poor value in the market, being relatively brittle. I have the tusks of a full-grown male shot in this area. They measure some three feet in length and weigh only 14 or 15 pounds each; their delicate shape, however, makes them a handsome trophy.

In view of the regulations protecting females and small tuskers, it is necessary to exercise proper care in discriminating between the two sexes. With big tuskers there is no difficulty, but it is by no means easy to distinguish between a 30 or 40-pound male and a large female. The female tusks are more curved than those of the male, and the male is the larger animal; the thickness and curvature of the tusks are, as a rule, sufficiently reliable characters. It is well, also, to make sure that both tusks are present.

The whereabouts of Elephants in elephant grass country may often be located if the hunter climbs any convenient tree near the track, and carefully studies the surrounding cover. This is well worth doing at frequent intervals, as the information so obtained is of the greatest value. Movements of the grass-tops or trees, or perhaps the sight of a White Cattle Heron, will often facilitate the arrangement of the final stalk, and perhaps even reveal a chance of a shot.

As to the advisability of taking refuge in trees to avoid an angry Elephant, there are different opinions. Personally, I think that the hunter is safer under such circumstances up a tree than down in the grass. But it must be remembered that only the largest trees are safe from demolition should the Elephant decide to use his trunk. Recollect that, in nine cases out of ten, an Elephant charges your wind, and the sooner you can get to leeward of him the more chance you have of escaping detection.

A heavy rifle is more likely to turn a charging Elephant than a light-bore, and the novice will be well advised not to employ anything lighter than a .450 for this kind of sport. Most men use a double-barrel for Elephants, and also for Lion, Buffalo and Rhino. My own heavy rifle is a magazine .404 by Gibbs, and it has proved efficient with all the four big animals. A double-barrel, of course, admits of greater rapidity of firing, but I prefer the magazine with its five or more cartridges at one loading, in spite of the noise made in working it. This view is, however, unorthodox, and there is a heavy balance of opinion in favour of the heavy-bore double-barrelled rifle. But there are experienced hunters who hold by the lighter rifles, such as the .303, .318, .350 and .375 bores. And if the sportsman is prepared to give the proper attention to stalking the game, and will school himself never to open fire until he is sure of hitting either heart or brain, he will not, I am sure, feel the need of the heavier bullet. If he cannot shoot straight when the opening presents itself, his best plan will be to keep away from the big animals altogether. Never use soft-nosed ammunition against Elephant. It is of the utmost importance that the bullet should reach the heart or brain by the shortest route, without running any risk of deflection by intervening structures. The head shot is the most satisfactory, if circumstances allow of a good square side view of the temple. Attempts to reach the brain by oblique routes, as when the animal is standing half-facing the hunter, are fraught with risk.

A bullet near the brain will probably knock the Elephant over, but it is exceedingly difficult to place your subsequent shots with any accuracy as the huge beast struggles to its feet. It is astonishing what a lot of lead a bull Elephant will carry away when once he has survived the shock of the first shot. Of course, luck may attend a foolish shot. On one occasion I came upon a party of natives who had rounded up an Elephant and were sitting waiting round little fires, in a wide circle about the thicket that concealed him, keeping up a continuous din, shouting to each other and blowing their little flutes. Their supply of spears had given out, and they were holding up the Elephant pending the arrival of a fresh supply from their distant village.

To put the animal out of his misery I offered to finish him off. The Elephant was standing near a large tree which had been struck by lightning, and was protected on all sides by dense thickets. The only glimpse I could get of his head, which was half facing me, was through the bush at a distance of about 20 feet; the root of one tusk and the base of the trunk were just about all that showed through, unobstructed by the interlacing boughs. There seemed no hope of getting a better view, so I fired through the bush in the direction of the brain, and dashed back to an open patch some 30 yards behind to await developments. There was no sign from the thicket, and the natives reported that he had not even moved, much less fallen. I returned to the edge of the screen and, sure enough, he had hardly altered his position; but this time a part of the front surface of the ear showed clear through the twigs. Again I tried the absurd shot through the branches at the invisible ear-hole, and this time he dropped like a stone. When I reached his side I found that the bullet had pierced the cartilage of the ear, inches outside the vital point aimed at, and had picked off the carotoid artery of the right side of the neck! Blood was still spurting several feet high from the wound. The poor brute was stuck all over with spears, and his trunk was riddled with wounds. Apparently he was thoroughly terrified and bewildered, and, with his chief weapon out of action, had no stomach left for fighting. The huge bulk of the Elephant makes a straightforward shot at either head or heart a very easy proposition to an experienced hunter. But such experience costs a lot of money nowadays, and it is just as well to have a tip or two to act on when the time comes, and we find ourselves confronted by the enormous form of our first Elephant at close quarters in thick country. Preconceived notions of anatomy vanish before a design of mammalian architecture which seems to ignore all the accepted standards of construction. The creation looks altogether omnipotent and invulnerable, and we are allowed no "sighters."

The depression over the temple is easily visible in the living Elephant, and a solid bullet striking this area just in front of the ear-hole, more or less at right-angles to the surface will enter the brain. An imaginary line drawn from the eye to the ear-hole passes across the brain-shot target.

In taking the heart shot, remember that this organ in the Elephant lies rather unexpectedly low in the lateral line and well forward in the huge body. This shot is, in my experience, very satisfactory, and does not require the same accuracy of shooting as the other. The animal may, and probably will, go 50 yards or more before he dies, whereas the successful head shot drops him like a stone.

There is, indeed, no doubt that with Elephant, Buffalo, and Rhino, the head shot is the ideal method of killing, and with Elephant it is more practicable than with the other two animals. Roughly, to locate the heart, let your eye prolong upwards the back line of the foreleg till this line cuts the hinder edge of the ear, the Elephant being stationary, with its ear against its side. A bullet entering some three to four inches below the intersection will find the heart. As a matter of fact the "bull's eye" is large enough to allow a good margin of error on either side of this point, and a six-inch circle with its top edge touching our point of intersection is what we have to hit.

There are other ways of killing an Elephant, but of these I have had no experience. A broken foreleg puts him out of action, as he cannot adapt himself to three legs as can a lighter animal. A bullet in the root of the tail paralyses the hind legs, and, of course, brings him down helpless. But these shots are obviously not to be recommended for routine procedure, and in practice it is surprising how indifferent to bullets that huge retreating stern can prove.

To the professional Elephant hunter all things should be possible; but the amateur will be wise to confine himself to the head and the heart, save under very exceptional circumstances.

Having at last killed your Elephant, you can leave the extraction of the tusks to the native hunter. It is just as well not to stand by and watch this process, at any rate, in the more delicate later stages, as the operator will handle his axe all the better if left to his own devices. It will be advisable to cut off and take away the tail at once, or you will find that charm-hunters will make short work of the bristly part of this organ. It is also excellent policy to see that the local natives get a proper share of the meat.

In following Elephant remember that a big spoor does not always mean big ivory. It is said that twice round the circumference of an Elephant's foot will give you approximately the height of the animal at the withers. It is always advisable to measure carefully the spoor of the particular beast you are following, for a time, at any rate, as other animals may cross his track or join up with him and this precaution will, perhaps, be helpful in keeping to his trail.

BUFFALO.—It is comparatively seldom that one catches sight of Buffalo in the open, even in places where considerable herds occur. The animals feed out during the night and return to cover early in the morning, and the sight of their heavy black forms in open country must always be regarded as a piece of real good fortune, to be profited by without delay.

Black is a rare colour among the Uganda game animals, and it is surprising how conspicuously a Buffalo shows up in a landscape. He seems aware of this and makes his arrangements accordingly.

In the course of prolonged wanderings in Buffalo country in the more open parts of the Northern and Western Provinces, I have been struck by the consistency shown by this animal in getting into cover in the early hours of the morning.

The pursuit of Buffalo in fairly open country is a vastly simpler undertaking than hunting them in elephant grass and forest. The beast is not his true self in the open. He likes a small ring where he can fight close and use his own peculiar gifts. He can be very quick on his feet, and this

agility is combined with the keenest vision, acute hearing, and a highly developed sense of smell. With his great bulk and strength he is thus a formidable antagonist. The Buffalo has, however, no great turn of speed, and is thus at a disadvantage if surprised away from cover. At the first alarm the members of a herd will often bunch together and advance a step or two, with noses and eyes fixed on the intruder, presenting an appearance altogether aggressive and menacing. But I have never seen animals, under these conditions, attempt to molest the hunter; after a moment or two they will make off at a clumsy gallop, the herd zig-zagging from side to side and stopping now and then for a backward stare.

A tree which an Elephant could kick over in his stride will prove a perfectly safe refuge against Buffalo, and this gives one a sense of security when hunting these animals in anything like open country.

As with all other game animals, scent means far more to Buffalo than sight or hearing. But their behaviour in this respect varies according to their experience of man.

In most parts of Uganda, directly the animals catch sight of the hunter they start making preparations for departure. But in some of the sleeping-sickness areas they are less timid. On one occasion I walked past a solitary old bull, some 80 yards away to leeward on a perfectly bare plain, without disturbing him in any way; he showed a desultory interest in our movements for a moment or two, and then resumed his meditations, and paid us no more attention. Like other animals, Buffalo, when once they have detected the human intruder, are almost certain to bolt if he attempts to dodge into shelter or crouch down out of sight. In such circumstances it is better either to take the shot without further delay, or else to endeavour to delude the animals into treating you as a harmless passer-by, by quietly walking in the opposite direction until out of their sight. This ruse, however, succeeds more often with Antelope than with Buffalo; and it is surprising how frequently an apparently excellent opportunity of approaching a herd in good stalking country is brought to naught by the extraordinary alertness of the beasts. When disturbed in the open, Buffalo invariably make for cover, but, unless they have been fired on, they will soon stand and await developments. They will do this while the wind is still against them, but when thoroughly alarmed will very soon contrive to run down-wind. A good tracker, with a knowledge of the country, may be able to foretell their probable destination, and, by making a detour, to pick up the herd again without crossing the wind. If this is impossible, it is best to wait for an hour or so and then resume the pursuit. By this time the wind may have changed and the animals have quieted down. It is of little use to press on after a herd once it has struck a down-wind course in thick country.

Before attempting to tackle Buffalo in thick country it will be well to ascertain whether native gunmen have been at work in the neighbourhood. These gentry have no idea either of the principles or of the ethics of shooting. They injure far more animals than they kill; and it need hardly be said that the presence of wounded Buffalo in a district makes it unhealthy for subsequent visitors.

I once came across one of these wounded beasts and can appreciate the reality of the danger.

We had been following the trail of a Buffalo in elephant grass, and were

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EAST AFRICA BUFFALO

"IS ANYONE LOOKING FOR TROUBLE?"

much puzzled by the frequency with which the animal had lain down. The track led across a recently burnt slope where the grass was still only knee high, and we hurried along in the hopes of coming up with the beast before it reached the thick cover again. Soon we came to yet another of the "forms" where the animal had lain down. There was a distinct fetid odour about, and close examination revealed a number of blades of grass smeared with pus. It had just left the "form" and was entering the exit track through the grass, when a big Buffalo got up some ten or twelve yards ahead and lumbered off straight away from us.

For a second or so I was too surprised to shoot, and stood there wondering what would have happened if he had come our way instead of making off. Then a lucky shot at his neck, as he altered his course a little, dropped him in his tracks.

The wretched animal was very thin. There was a wound, crawling with maggots, just alongside the root of the tail, and the bullet that had caused this wound was lying under the skin of the left shoulder; it had traversed the intestines and the liver to get to its final resting-place. The state of the abdomen can be imagined, and the liver contained a huge area of necrosis.

Subsequent inquiries revealed that a native, who was hunting for hides, had visited the district some three weeks before; and his victim had been dragging out a miserable existence all that time in agony and slow starvation.

In dense cover the actual shooting is all done at very close quarters. In such circumstances it is risky, in my opinion, to take any but the head shot. A Buffalo hit through the heart *might*, at such close range, give a lot of trouble before it died.

It is seldom indeed that you see your animal before it sees you; and, as a rule, when you first catch sight of it, the beast will be staring at you through a gap in the foliage with its nose well up and most of its body hidden from view. When the head is raised in this manner there is a space of a few inches visible between the upper edge of the shining black snout and the lower margin of the horns. This space is occupied by the nasal and frontal bones of the skull, which slope obliquely backwards owing to the upward tilt of the head. A bullet anywhere in this area, within an inch of the middle line, will find its way into the brain. I have never tried the nostril but imagine the result would be the same. In my experience of this head shot, I have never known a properly directed solid bullet to glance off the skull, or fail to punch a neat hole in the nasal bone and drop the beast dead. The area indicated may seem small and difficult to hit; but it must be remembered that under the conditions we are discussing, ten yards is a long shot.

It is important to avoid taking any but the safest shots against Buffalo at very close quarters, and if this principle is observed accidents will be rare. Once your animal is wounded the whole complexion of affairs is altered, and it must be realized that there is a very real danger in remaining in its vicinity in this kind of country.

In my early days after Buffalo I once fired a soft-nosed .350 bullet into the nose of a cow Buffalo that had been wounded overnight in thick elephant grass. The animal was lying facing me with its forelegs doubled up under it some five yards away, and I was obliged to lie at full length

in order to see it at all. Leaves across the barrel of the rifle prevented the proper vertical adjustment of the sights, and the bullet entered immediately above the right nostril. The animal got up and came at me, and during the encounter I got a glimpse of it just behind me as it stood half-dazed and undecided what to do next. The beast's legs were spread out to support the swaying body. There was a large clot of blood hanging down from the wound across the black nose. The animal eventually staggered off and dropped dead in the elephant grass some thirty yards away. Subsequent examination showed that the bullet had torn away the top of the tongue and gone on down the throat, doubtless breaking up the windpipe and probably injuring some of the big blood vessels.

When Buffalo are followed in thick country for hours at a time, a single beast may elect to turn in its track and stand waiting until the pursuer comes into view. This has happened three times in my experience; on two occasions it was a cow, and once a bull, that stopped behind to investigate. In neither case was there anything aggressive in the animal's attitude; it was standing in the track with its head up, staring straight at us, and looked rather startled than otherwise.

On one of these occasions, I had already given up all hopes of again coming up with the herd, and had handed the rifle, with the safety catch down, to a boy behind, while the tracker was noisily pushing his way through the grass ahead. Suddenly our leader stopped and pressed himself against the side of the track, eagerly beckoning me to come up and pass him. The boy with the rifle had lagged behind, and I had to wait while he crept up: it was then necessary to get past the tracker before the animal came into view. A full-grown cow was standing just five paces away, staring fixedly at us. The rifle had to come up slowly right under her gaze, and at last the sights were aligned and the report sounded. She dropped stone-dead with a hole in the left nasal bone, the bullet having instantly gone up into the brain. If this animal had intended attacking us nothing could have averted a serious accident; but I think she was just weary of the constant alarms, and wished to see for herself what it all meant.

It is advisable always to use solid-nosed bullets for Buffalo, even when taking a comfortable heart shot in open country. Soft-nosed bullets have an unpleasant trick of turning aside out of their original path.

I remember on one occasion taking careful aim at the chest of an old bull Buffalo standing facing me some 100 yards off. The soft-nosed bullet struck him in the breast-bone, near the middle line, but, instead of going on into the heart, turned aside and broke a shoulder-blade. It took several more shots to dispatch this beast, and during the process it did a good deal of running about. A solid-nosed bullet would almost certainly have reached the heart at the first shot.

Many sportsmen speak highly of the neck shot for Buffalo, but I have only tried it on two occasions; once against the sick beast referred to above, and again with a Buffalo which had been brought down by a running shot, with the hindquarters paralysed. When I came up to it the animal was pivoting round and round by means of its forelegs, and it seemed to be an excellent opportunity to test the value of the neck shot. I put two bullets into the neck at short range without killing the poor beast, and finally dispatched it with a shot through the heart. Brutal

though it sounds in the narrative, this was an honest attempt to put the animal out of its misery. I quote the incident to show that the idea held by some sportsmen that a bullet anywhere in the middle of the neck will kill a Buffalo instantaneously is incorrect. The efficacy of the neck shot depends on the bullet picking off either the carotid artery or the windpipe or the spine, and in a big animal like the Buffalo it is easy to miss all three.

It cannot be too deeply impressed on the novice that a wounded Buffalo is a very dangerous animal—savage, powerful, agile, and, perhaps more than any other animal, full of determination and courage.

The following episode illustrates the two latter characteristics in a striking manner.

A native tracker had brought me close up to a solitary bull Buffalo which was standing quite undisturbed in a small deserted banana shamba in the midst of the elephant grass. We could see what I took to be the line of the chest and foreleg, as he stood broadside on, with his head and the rest of his body completely hidden. Knowing that further approach was impossible, I broke my usual rule and fired where I calculated the heart must lie. The beast rushed off, and as he did so it was evident that what we had seen of him in the first instance was the line of the hind leg and groin, and that the bullet must have hit him somewhere in the loin region. We heard him bring up not very far off, and then all was quiet. After a long wait I crept up through the old shamba towards his resting-place, and reached an ancient bark-cloth tree whose trunk was thickly festooned with a mass of dense creeper. The tracker pulled himself up on to the dome formed by the creeper over the old tree. Seated comfortably on the top he eagerly beckoned to me to follow him, his gesticulations indicating that the Buffalo was visible in the elephant grass below. I climbed up beside him and saw, 40 yards away, a patch of the animal's black hide at the end of a little bay of shorter grass that extended from the base of the tree into the dense "ebisagazi" that surrounded the shamba.

The native descended and established himself in a convenient tree behind mine, and we sat waiting developments.

Three-quarters of an hour elapsed without a movement from the Buffalo. Then, without warning of any kind, he plunged out of his hiding-place and charged almost up to the foot of the tree where I sat 30 feet above him.

As he came I fired two shots into his back, and baffled in his quest, he turned off sharp near the tree and entered the tall grass, where he brought up some 30 yards away. I could see where he was lying by the break in the grass tops, but the brute himself was quite invisible. He was now breathing heavily, having been badly hit through the lungs.

From my elevated perch I directed the native to descend from his tree and to pitch pawpaw fruit, old pot-sherds, and clods of earth over the grass tops in the direction of the Buffalo. At last he found the correct range, and several times missiles struck the animal's body. Twenty minutes or so passed without any further sign from the stricken animal. Then with the remnant of his strength, he made a final effort to reach his foe, and, hidden this time by the long grass, dropped dead right at the foot of my tree.

This old bull had a soft-nosed bullet through his abdomen, high up

near the kidneys, and two similar bullets in his lungs. During the whole encounter there was practically no wind, and he must have located our whereabouts by hearing alone as we climbed the tree. It was an impressive sight to see him coming along that little short-grass bay towards the tree, turning neither to right nor left as the two shots struck him, and only relinquishing his purpose when the tree stopped his advance.

In my experience, a charging Buffalo always keeps his head up and his nose well forward. The popular conception of the beast stretched out like a race-horse at full gallop, with nose to the ground and horns poised ready to penetrate the still distant victim, in no way corresponds with the reality. I have seen Buffalo in this traditional attitude on one occasion only, when a little bunch of seven, driven out of some cover by natives who had worked round behind them, elected to emerge just at the spot where I was standing. The herd split up to pass me, animals going on either side at a distance of a few yards. As they left the shelter of the long grass, several of them threw down their heads and cocked up their tails as they galloped along, for all the world like a bunch of cattle careering along a field at home. After all, when its head is down, a Buffalo cannot see where it is going, and the all-important nose is getting filled up with the dust raised by the animal's hoofs.

Buffalo undoubtedly toss their victims, but will also kneel and trample on them; and there are instances where this trampling process has been carried out with terrible thoroughness.

The presence of a dog will often distract the attention of an infuriated Buffalo from the hunter. I once watched a little native cur yapping round the head of a wounded beast that was on his way towards me over some dried-up and heavily pitted swamp ground in the Katonga River bed. The bull had attempted to cross a ditch about five feet wide that luckily lay between us, and was in the water up to his neck, with the dog keeping level with him on the bank. The Buffalo made no attempt to get out, but ploughed its way along the ditch towards some papyrus that offered shelter from the plucky little dog.

A well-known Uganda hunter owed his life to a bull terrier which hung on to the nose of a wounded Buffalo, and so gave its master time to finish off its huge antagonist.

I do not wish to belittle this great animal as a potential source of danger to the hunter, but simply to emphasize the vast difference that exists in this respect between a wounded and an unwounded Buffalo. Another man's experience may be totally different from mine. Buffalo are always worthy of the greatest respect. In the open it requires the most skilful stalking to come up to the herd and to recognize and isolate the desirable head. In thick country, the pursuit of the unwounded animal offers as good sport as is obtainable in Africa, whereas a wounded Buffalo is a very awe-inspiring and accomplished opponent.

LION.—In certain parts of Uganda Lions are often to be heard roaring at night, but nowhere are they really common and my own experience of the animal has been derived mostly from districts outside the Protectorate. Lions, like Leopards, have a knack of turning up when least expected. Many men in Uganda have tried sitting up for them, but very few have ever been rewarded with the chance of a shot.

For years past Lions have been rare visitors to the elephant grass districts

of the Buganda Province. Occasionally stray animals venture down as far as the hills over against Jinga; but these wanderers are mainly interested in Bush Pig, and, in consequence, seldom leave the thick cover. Lions are also to be heard throughout the dense country of Busoga, but here again it is an almost hopeless task to hunt them. Quite recently a small party of Lions actually penetrated Entebbe township where they perished ignominiously. In Bugerere and in the country near the Kafu they also occur, likewise throughout the Northern and Western Provinces. In the unique game country already referred to in the Rudolf and Eastern Provinces, Lions are more common. For the visiting sportsman, however, the places most likely to yield Lions are the plains along Lakes Albert, George, and Edward and the Victoria Nile, also certain parts of the Ankole district, and the Bukanga country near the Kagera River.

In no part of Uganda do Lions constitute a serious nuisance to the human community, and there is no doubt that they do considerably less damage than Leopards: even in the great cattle districts of Ankole they cause but little trouble among the native stock. In many areas where they do occur their chief food animals are Giant and Bush Pig, both of which live in thick cover.

In a district where Lions are numerous they soon make their presence felt. In Uganda there are many European residents whose occupations allow them to hunt from time to time, and it is surprising how few of these have met with Lions in the course of their wanderings. We must conclude, therefore, that the King of Beasts does not find things to his liking in the Protectorate, where the throne is usurped by a worthy though less assertive claimant to the title—the mighty African Elephant.

My experience has led me to regard Lions as a gift with which Providence sooner or later will reward the persevering hunter. The more time he spends in walking around in game country with his eyes open and a suitable weapon in his hand, the sooner will the chance present itself. On this assumption I frequently take a stroll with a rifle at odd moments in the neighbourhood of camp, not deliberately looking for Lions but with the idea of giving Providence every chance. All the Lions I have seen have turned up more or less unexpectedly; and not always in the early morning or the late evening, according to schedule, but sometimes in the full heat of the day.

It is often an excellent plan to put out a few natives in extended order on either side, and so patrol a big stretch of likely country. In this way I flushed plenty of Lions on the Rutchuru plains, after having had repeated failures with kills; the men often extended to 500 yards apart, and several times the signal came from one of the wings.

Never fail to investigate the source of attraction when Vultures are observed drifting round in circles anywhere near the ground. The birds may often be seen patrolling the country at a considerable height, but when they are near the earth and particularly when they settle on trees or on the ground it is almost certain that some animal remains are near by.

My attention was on one occasion drawn to a Lion by observing a single Vulture which was circling several hundred feet above the ground. In this case there was no sign of a kill, and the bird was apparently following the animal on the off-chance of something turning up.

In marking down a kill by watching Vultures great care must be taken

in approaching the spot not to alarm the birds too soon. The moment they begin to rise, any animal that may be in the neighbourhood will take the hint and slink away, and an excellent chance may thus be lost. Large numbers of the birds will collect in a wonderfully short time, and a seething mass will often be seen struggling over the dead animal. When possible, it is advisable to reconnoitre the immediate neighbourhood very carefully before revealing one's presence, as the Lion, if there be one in the vicinity, will not necessarily be on the kill.

One day, while hunting for meat in the open bush country near the Victoria Nile, accompanied by a native or two to carry the spoils, I almost stepped upon a full-grown male Lion lying fast asleep on its back, with all its four legs stuck up in the air. We came on the animal as we rounded one of the small clumps of thicket that dotted the plain, and luckily its tail was towards us. The whole of its under surface was covered with tiny *Lyperosia*-like flies, and it was panting like a dog after a hard run, the respiration rate being about one hundred and thirty to the minute.

At first glance I thought it was a sick beast at its last gasp, the extraordinary attitude suggesting a carcass washed up by the tide. We beat a cautious retreat without disturbing the animal, and made for another clump about sixty yards off in the shelter of which I hoped to creep round and open up a view of its shoulder. There was a convenient break in the wall of the thicket, and we were making for this when, through the opening, I caught sight of a Lioness with her head resting on her forepaws, fast asleep in the middle of the clump beside the body of a freshly killed Kob. It seemed inadvisable to continue our manœuvres against the male and leave his lady on our flank, so I stepped back a little and fired at her head, getting not too clear a view owing to the shadows of her surroundings. Having fired, I rushed back to see what had happened to her mate outside, and arrived just in time to see him slinking off behind the thicket we had just left, presumably on his way to join the Lioness. Not a sound did either animal make, and we took up a position some one hundred yards away with a good view of either side of their hiding-place, to wait until one or other should decide to move.

At last a low growling from the clump announced developments of some sort, and in a moment or two the Lioness staggered out, stumbling at every step, and holding her head down between her forelegs. She was broadside on to me, and a shot through the heart finished her off, and we anxiously awaited some sign from her companion. A moment or two elapsed and then he suddenly hove in sight, three or four hundred yards away, bounding off towards the forest-belt along the river edge. I missed him twice and then hit him with a solid bullet as he paused for a moment before entering the forest. His course took him in a semi-circle round where we stood. The bullet failed to stop him, and he sprang into the forest and disappeared. These animals were apparently sleeping off the fatigue of their night's hunting, as the Kob was practically untouched. Needless to say, the carcass was much appreciated by the native staff. The Lion, as he made off through the forest, passed within a few yards of my porters, who were busily engaged in cutting up a Hippo which we had shot on the way out. The report had not disturbed the Lions, though they were lying only some three hundred yards away.

What impressed me most of all during my first encounter with a Lion



Plate 83

LION (EAST AFRICA)

SHOT BY H.R.H. THE DUKE OF GLOUCESTER BY WHOSE KIND PERMISSION THE
PHOTOGRAPH IS REPRODUCED.

was the way in which the animal, the moment he caught sight of me, crouched down slowly into the grass and lay watching for a moment or two before it made off. The action was sinister and quite unfamiliar. Reedbuck and Oribi will crouch in the grass, keeping their heads well down, with the obvious intention of escaping notice. But the Lion's crouch has quite another look, and suggests an infinite aptitude to reverse the respective positions of hunter and hunted that is peculiar to the great cats.

It is generally recognized that Lions, in countries where they are common, may roughly be divided into two categories, according as to whether they live in the more or less open plain country or in the bush. Plain Lions have plenty of food, and life goes smoothly for them; bush Lions, on the other hand, have, presumably, more difficulty in obtaining their prey. Plain Lions, unless wounded, are less likely to take the offensive against the hunter than is the bush animal, partly, it would seem, for temperamental reasons, partly because their more open habitat places them at a relative disadvantage to their opponent. The same difficulty that the bush Lion experiences in stalking his prey confronts the sportsman, but with tenfold force, when he attempts to hunt this master hunter on his own ground.

As with Buffalo, Uganda Lions would doubtless prove very different customers if pursued in elephant grass and forest, from what they are when put up in comparatively open country; in this case, also, there is all the difference in the world between the wounded and the unwounded animal, especially in thick cover.

It is generally admitted that, if a Lioness be present in a group of Lions, it is safer to commence operations by shooting her. Whereas a Lion will seldom charge unprovoked, a Lioness will often attack the intruder. Such advice is, however, a counsel of perfection, and most people will prefer to make a firm bid for the maned male and take the chance of subsequent interference from his companions.

A Lioness with young is a very dangerous neighbour, and may attack at the slightest provocation. But there are instances of a Lioness charging after her mate has been wounded, when there were no cubs in the picture.

I have on several occasions put up and followed a mixed company of Lions and Lionesses, and, invariably, their one and only object seemed to be to get away as quickly as possible.

The only time I have ever been near a Lioness with young was in the thick thorn scrub around Schinyanja in Tanganyika Territory. I had shot a full-grown Lioness just before sunset, and four of us had tried in vain to lift the body into a thorn tree out of the way of Hyenas. The animal was one of a group of five or six, one of which was a full-grown male, which we never saw again. The others, Lionesses and maneless males, hung around for a little while after the death of their companion. With the aid of a pocket-knife we laboriously disembowelled the dead Lioness and again attempted to lift her, without success, and eventually the carcass had to be left for the night covered up with branches and grass. Early next morning I returned with a friend and a couple of natives to take away the skin, and found a large Lioness sitting on her haunches near the thicket into which we had dragged the body. She caught sight of us at the same moment that we saw her, and immediately bounded

into cover, and a second or so later two small cubs emerged from the thicket and jumped in after her. The little beasts had made a good meal off the thoracic viscera of the dead Lioness and had pulled a little at the skin round the wound, but the opening of the body had doubtless shown them a way to their meal and saved the skin. We took up the trail of the family, but after thirty yards or so were stopped by a growl from a dense thicket into which the trail ran. A detour round this thicket showed that the animals had left, and we took up the trail again, resolved to be particularly cautious henceforth. The bush was now very thick and the bare areas between the thickets were becoming less frequent. After another eighty yards or so a more pronounced growling again held us up, and, after a brief consultation we decided to leave her alone as, with only .303 rifles, we should have made a poor show against an infuriated mother in such dense cover. No doubt, had we persisted, this Lioness would have attacked, although none of the party overnight had attempted to molest us. The interesting observation of Lion eating Lion was entirely new to me; but I was told subsequently by a well-known East African hunter that this is a common occurrence when a dead Lion is left out all night.

The only other occasion when I have come into close contact with a Lioness was while following the trail of an old male Lion on the Rutchuru plains. The track through the grass had emerged on a bare patch of hard ground, and while we were searching along the opposite side to pick up the spoor a Lioness sprang up literally at my feet and bounded off without protest of any kind in the direction taken by the old male. Her "form" coincided with the point where the old gentleman's track entered the grass again.

On the Rutchuru plains Lions and natives live on excellent terms, and pass one another on their daily business with mutual unconcern. The natives prowls about these plains looking for Lion kills and taking what meat is left over. It was on these plains that I witnessed the remarkable sight of a full-grown Lioness walking across a bare depression in the plain, right through a great collection of Kob and Reedbuck, without in any way disturbing the Antelope. She passed within a few yards of the feeding animals, and stopped now and then to look back at the tree behind which I was trying to keep out of sight some four hundred yards away. The animals looked up as she passed, and those right in her track just stepped out of the way. When she was well up the opposite slope and had ceased to look back I started to follow her. The moment they saw me the Antelope showed the greatest alarm and galloped off, and the Lioness quickened her pace and reached the dense bush by the river without giving a chance of a fair shot.

On these Rutchuru plains I never succeeded in getting Lions at kills left out over night. On one occasion two Buffalo carcasses, one disembowelled and the other absolutely untouched, were left out all night, distant about a mile from each other; and on several nights freshly shot Kob were used as bait. The kills were visited half an hour before sunrise, and, on one occasion, I saw a single Jackal; never a sign of Lions nor even of Hyenas.

Other hunters, some eighteen months before, had very different results, and bagged several Lions on kills in the same area.

For those who wish to try this method of attracting Lions, Zebra and Eland are probably the best bait to use.

A Lion will, on occasion, take a dead bait; but the Leopard is more fastidious, and only eats what he himself has killed.

Soft-nosed ammunition is generally considered more suitable than solid for Lions. It is seldom that one tries the head shot against this animal. The brain is small and the great shaggy head is so constantly in motion that it is a very risky and difficult shot to take. It is important, also, that the animal should get the full benefit of the shock of impact, and this will not occur if the bullet goes clean through the body and out the other side.

I have used solid .404 ammunition on Lions and have found that at ranges of more than one hundred yards the bullet holds the body; but at close quarters a solid bullet might easily go right through.

Once he is wounded a Lion can carry a great deal of badly placed lead, and his rage is a tremendous stimulus to keep him going. I have seen an old male Lion with three .404 bullets in his chest, all just behind the shoulder line and free of the heart, make a very creditable charge into a group of over-confident natives, knock over one and pull down and stand over a second before a lucky shot in the right place turned the beast off to die a few yards away from his terrified victim. The Lion tripped up the first man by a tap of his paw against his running feet, and, while the fellow regained his feet, he went on after his companions, all of whom seemed unable to make up their minds to get up speed and scatter in flight.

Their behaviour on this occasion was, I think, based on the implicit faith that natives show in their "Bwana," a trust that at times throws a big responsibility on the European. We all of us thought, from his behaviour, that the animal was dead, and I had told them that if he *did* get up I would finish him off from where I stood, some sixty yards away on the flank. The beast was lying in a patch of grass which was just long enough to hide him. He let the men come up to within a few yards of him before he stirred, although he had been heavily bombarded with stones and clods of earth to tempt him to reveal himself if still alive. The Lion trod on the second man's elbow and dug his claws in deep, and also tore away the big-thumb muscle from the bone, but he did not use his teeth, and the man made a good recovery.

The only shot of which I have had any experience with Lions is the heart shot, and, in practice, with an unwounded animal, there seems no reason why the hunter should shoot until he sees the shoulder or gets a clear view of the chest from the front. After getting in your shot it is well to wait a while and let the bullet take full effect. Fill your pipe and smoke it out before you start investigating. A mortally wounded Lion must be given time to die, and there is nothing to be gained by witnessing his death struggles.

UGANDA (*Continued*)

CHAPTER THREE

LUCK IN ELEPHANT-SHOOTING IN UGANDA

By A. C. KNOLLYS

AS in everything else luck, both good and bad, plays a large part in the pursuit of big game, but that is not to say that a hunter should depend entirely on it.

The two following accounts afford examples of both kinds of fortune, which fell within my own experience.

I had approached to within about 40 yards of a solitary bull, with a beautifully clear broadside-on head shot, and had fired with the utmost confidence of a kill when, in a second or two, an Elephant charged out from the other end of the cover of bush which had concealed all of my quarry except the head, and made straight at my police orderly. The orderly, who was carrying his issue .450 Martini, loaded only with a soft-nose bullet, dropped on his knee and took a pot shot at the charging beast, and evidently hit it. As it was then less than 30 yards from him he could hardly have missed it, and he then promptly crouched down on his face. For some inscrutable reason the beast literally leapt clean over him and with its trunk seized one of the trackers who had been standing immediately behind the policeman, and had turned about and foolishly started to run away in the direct line the Elephant was following.

The whole episode so far could not have occupied more than five seconds, and it had taken me quite that time to recover from my surprise and to open fire on the infuriated beast of which I could see nothing but the hindquarters and the trunk, waving aloft the unfortunate tracker. With such a target there was no hope of bringing the animal down, and I was merely firing as fast as I could in the hope that it would make the animal release its hold upon the native. After carrying the man about 50 yards the Elephant flung him away some distance through the air, but not before it had thrust one of its tusks through his back and out again through his chest and so killed him.

Later, when I went back to look for the beast I supposed I had shot, there was no sign of it, and it was not till that moment that I noticed that the leaf of the backsight of the .404 rifle with which I had fired at him was raised to give a range of 400 yards. I could only suppose that the waist-high grass, through which I had had to approach, had caught and pushed up the backsight of my rifle, with the result that my close range shot must have gone clean over his head, instead of into the brain. Quite apart from the very regrettable death of the unfortunate man, whose chief and relatives I compensated to their complete satisfaction with a

ridiculously small sum of money, I lost my field-glasses which, with a bandolier and hunting knife, he was carrying. The two last were picked up near the body, but the glasses were never seen again, although I offered a handsome reward for their recovery.

I quote an example of exceptionally good luck.

I was nearing the completion of a fortnight's local leave, in fact only four days of it remained, and it would take me at least three of them, and some very strenuous travelling, to get back to my station. The licence I then held entitled me to kill three Elephants, and would lapse before I could hope to get away again. Consequently I had been on the look-out for something really big in the shape of tusks, with the result that up till then I had scorned opportunities which had occurred of bagging fifty, and possibly sixty, pounders, so that with only one more day for shooting I was naturally anxious to secure anything of a decent size.

Nine o'clock, and two hours of good going from camp had brought us to a hill top from where, about half a mile away in the valley below, we saw a very small herd of about a dozen Elephants quietly browsing and dozing. I immediately lit my wind-testing cigarette and found that a very gentle breeze was blowing from left to right. When half-way down the slope the smoke of the cigarette, which I was naturally watching very closely, proceeded to drift in exactly the opposite direction, which would not suit our book at all, and necessitated a complete left turn. When exactly opposite, though still some way above the herd, in my original position, the direction of the wind was again from left to right.

These variations of wind are extremely common in hilly ground such as we were in, and add considerably to one's difficulties when approaching game. As it was obvious that further progress would only result in similar diversions of the air current I decided to make a direct approach down the hill on to the objective, and chance it. Luck was with us, as on reaching the valley, with the herd about 60 yards to the left, the very little wind there was was in our favour. However, to counter-balance this, I found the Elephants standing in such high grass that, although we approached to within 40 yards of them, only about 12 inches of their backs and practically nothing of their heads was visible. The grass was just the ordinary kind, and not "Elephant" grass.

The belly-rumbling of the beasts assured me that our presence was not even suspected, but the grass was tinder dry, and crackled alarmingly under my tread, however carefully I moved. A most tantalizing position—afraid to advance for fear of alarming and bringing the animals in our direction, or, what would be almost as bad, stampeding them in the opposite direction. I was simply paralysed into inaction.

A whispered parley with my native hunter ended in his volunteering to go still closer and ascertain which of the several beasts I should go for. He was a large man, and it was almost uncanny to watch him creeping soundlessly and rapidly through the grass, which rustled loudly at the slightest movement on my part.

After what seemed to me like a quarter of an hour, but was probably less than a minute, he re-appeared as quietly and quickly as he had gone, and pointed at one beast which he reported to be the biggest tusker of the lot. He wanted me to take a chance shot there and then, with a heart shot.

While I was trying to make up my mind whether to follow his suggestion and risk a shot at a target I could not see, between which and myself, moreover, anything might intervene to deflect the bullet, or to take what seemed the lesser risk of a closer approach for my own more favourite head shot, we saw the nearest beasts turn slowly and deliberately and start to move toward us. A hasty rearward retreat brought us to a respectably sized white-ant hill, about 7 feet high and about some 30 feet to the right of the path the animals would apparently take. It was the only bit of cover available, so the hunter, two gun-bearers, and I made the most of it and watched the beasts slowly approaching in single file.

A couple of cows led the procession, followed by a very immature bull. In a tense whisper the hunter told me that the fourth animal in line was the one he had picked out as carrying the biggest tusks in the whole herd. As this fellow came abreast of our cover I let fly with each barrel in quick succession of the .450/.500 I was carrying, the range being about 20 yards. We were on slightly higher ground than the Elephant, and consequently I had an ideal head shot. He was down on his knees instantly, and as the animal immediately following bumped into him, he rolled on to his side.

The complete unexpectedness of the attack brought the whole herd up standing for a second or so, and gave me sufficient time to observe that the beast behind my victim also carried a good-looking, though somewhat smaller, pair of tusks.

Without taking my eyes off this animal, though expecting to have to leg it for all I was worth the moment the herd recovered from its bewilderment, I passed back my empty rifle to be exchanged for the D.B. .600, without waiting to think, probably in the confusion of the moment being unable to do anything but act automatically. With another clear head shot I aimed and fired at the second beast, which delighted me by also sinking on to its knees and rolling over.

The whole affair was the matter of seconds, but the minutest details of it have never faded from my memory. It is that kind of experience which so much more than compensates for the strenuous labour and bitter disappointment which are so frequently the only result of a day after Elephant.

My story, however, is as yet, only half finished.

By the time the second beast had fallen the remainder of the herd had recovered its wits, the leaders, fortunately for me perhaps, had made off full tilt in the direction in which they were originally heading. But two of the animals immediately behind the second beast I had dropped, which was making feeble but ineffective efforts to regain its feet, ranged up on each side of it, levered it into a standing position, and, supporting it between them, ambled off in the wake of the herd.

It was my turn to be astonished! I was so amazed and taken aback by what was happening that they had got going before I realized that it would be as well to give the beggar another round. Raising the rifle I pressed the trigger and—nothing happened!

Incredible as it may seem it was not until that moment that I realized that the rifle that had been handed to me was a Mauser .275, fortunately (though in accord with my invariable habit when following Elephant) loaded with solid-nosed bullet. Even so the fact that the calibre was so small is the probable explanation why the beast had had any kick at all



UGANDA

Plates 84—86

Top. WATERBUCK (C. DEFASSA), UGANDA. GENERALLY FOUND NEAR RIVERS OR SWAMP.

Centre. ELEPHANT ABOUT TO CHARGE. A VERY FINE BULL.

Bottom. WHITE RHINOCEROS. A MOUNTED GROUP IN QUEX MUSEUM. NOTE THE SHAPE OF THE JAW AS COMPARED WITH THE BLACK RHINO.

left in him; a .600 solid bullet at the 25-yards range at which he was shot, even if it had not proved fatal, would have stunned him.

He was, however, obviously too badly wounded to get very far, so that soon after we had all started in pursuit. Realizing that my hunter and trackers could make much better progress without me, I told the bearer carrying my .600 to stay with me, and we would follow the others at a pace more in keeping with my winded condition.

After a bit of pretty rough going it appeared that the line the herd were following was parallel to the one we had taken from camp that morning, so I decided to do my bit of following along the high ground rather than in the valley. Incidentally I wanted to make sure that one of the usual horde of trackers who come out on such occasions, who had been told to remain on the hilltop when we first descended, should be instructed to stand by the carcass of the first Elephant I had brought down.

In due course, in company with my gun-bearer and the remaining trackers, we set out. I fondly imagined we were killing two birds with one stone, that is, following the herd's direction and making for camp at the same time.

We had travelled for certainly not more than a mile when I, who was leading the party, saw coming in our direction, just off our path to the right and on a lower slope, an Elephant with others following it in single file, which I took to be our herd of the morning returning on its tracks, probably with the intention of rejoining the main herd from which it had become detached.

By the time I was cleared for action the leading beast was abreast of us, at a range I roughly estimated of about 50 yards. Once again I was baffled by the fact that scrub and long grass hid its tusks so that I dared not fire. Numbers one, two, and three passed in the same fashion, but just before the fourth came to the spot I had marked in my mind as the best for a shot, up went its head, showing itself a bull with quite useful-sized tusks. I took a snap shot and over it crashed. In the circumstances I could not believe that I had done anything more than stun it, and proceeded to reload to find that both cartridges had been fired. I had certainly not intended to fire more than one barrel, and can only suppose that in the excitement of the moment I had fired both simultaneously. Stranger still, neither then nor afterwards was my shoulder in the slightest degree bruised. This was even more surprising when I found that, no doubt in the momentary excitement, the rubber shock-absorbing pad had slipped off the butt of the rifle, and was lying at my feet; if you do not appreciate my meaning try firing from the shoulder, two barrels simultaneously, of a D.B. .600 Express rifle.

But my luck held. The beast proved to be stone dead, and eventually to possess the best, by over 20 lbs. apiece, of the three pairs of tusks I had been so extremely fortunate as to secure between breakfast and lunch, for the second wounded Elephant was found and reported dead by my tracker the same day.

(1) Arms and ammunition, recollecting that the .303 bore is debarred from entry in Tanganyika Territory and adjoining territories.

(2) Smaller articles of camp equipment, such as beds, bedding, mosquito-nets, utensils, but not tents, which can be hired or purchased in the territory.

(3) Skinning-knives and curing materials.

(4) Luxury foods in tins, and wines and spirits.

Of fitting-out bases I should advise Moshi and Arusha as being nearest to hunting-grounds.

Mechanical transport can be hired in both places and will be most useful to reach a hunting-base, and to replenish supplies thereto.

(5) It is desirable to obtain beforehand large-scale maps of the regions it is proposed to travel in, and these can be purchased from the Director of Surveys, Dar-es-Salaam, who could be asked to post them to an address in one or other of the three places named previously.

(6) Game Law Regulations can be obtained at all Government stations in the territory.

(7) The cost of licences is apt to vary. Visitors' licence, with a large range of animals permissible for shooting, used to be (1928) £75. Elephant licences, £20 for the first Elephant, £30 for the second Elephant.

(Note.—These rates are liable to alteration or the numbers re-defined.)

Climate

It has been mentioned that the climate of the northern area of Tanganyika Territory is, despite the fact that it is close to the Equator, extremely good, and, for the most part, healthy and free from malaria or dysentery.

At the same time the ordinary precautions that every traveller must take in the tropics should not be disregarded. While the days are naturally warm to hot, the nights are cool and pleasant. As also mentioned before, but reiterated for information, the areas where shooting can be obtained will, in elevation, vary from 3000 feet to 10,000-12,000 feet above sea level, and the average elevation of the best shooting-grounds is about 5000 feet above sea level.

Seasons

A normal season in the northern area, where the rainfall varies from a few inches only to sixty inches per annum, and, in the main areas, being about twenty-five to thirty inches, it can be said that no time of the year is impossible for shooting. But naturally seasonal growth of grass and bush will make visibility of game and curing of skins difficult.

The best period for touring is, I think, mid-June to November, and again in January and February. March, April, and May are months, if possible, to be avoided as then the seasonal (greater) rains are generally in progress. Heavy rains make travelling by car almost impossible or very difficult and unpleasant, and the curing of heads and skins most disappointing. These months are also inadvisable for native carriers to work in, as tentage would have to be carried or grass huts built at every camping-ground.

Though many a good head has been bagged in the rainy season, it is not, on the whole, to be recommended, and the other months are so pleasant that they should be chosen in preference.

In June the rains are subsiding, and usually only minor showers are

prevalent. Nor is the grass and bush growth yet too thick, and so hunting and spooring of game is the more easily accomplished.

July and August are cool, pleasant months, but long grass is abundant and visibility bad, so that September and October are really better months for hunting as the grass is dying down or being eaten up by game or cattle and some rainwater pools still remain.

So on till the close of November, recollecting that as the water pools dry up the commoner game will be restricted to permanent waters and rivers.

In November and December there is usually some rain, so hunting becomes easy again.

To sum up, barring the months of March, April, and May, the other months are always suitable for shooting, as most of the grassy plain lands of the northern areas are short grass, even following rain, and so easy to shoot over.

Servants

Native servants can be obtained in all three places, Tanga, Moshi, and Arusha. It is usually best to get the servants required from up country, as coast servants are no good at trek life, dislike the cold of the highlands, and are expensive. Quite good native servants can be obtained among the Arusha, Chagga, Meru, Mbulu, and Irangi tribes of the northern areas, and good guides from the Masai and Arusha and Mbulu tribesmen. Every hunting locality has its useful guides and these can be enquired for from district officers of the Government stations.

An average monthly wage for the servants of the tribes mentioned, to which it would be necessary to add food allowance on tour or in camp, would be:

Cooks, thirty to fifty shillings per month.

Personal servants, twenty-five to fifty shillings per month.

Cooks' mates, fifteen shillings per month.

Gun-bearers, thirty to fifty shillings per month.

Skinners, thirty to fifty shillings per month.

Carriers, fifty to sixty cents a day and food.

Caravan porters should perform the tasks of hewing wood and carrying water.

An average food allowance, or food in lieu when not purchased by the servant, would be thirty to fifty cents per day.

In addition most servants expect to be given a blanket, especially the juniors. This is a matter for discretion and advice should be sought before blankets are handed out indiscriminately. Tact and judgment are necessary for dealing with the demands of servants for accessories such as blankets and tobacco. Demands should be resisted as far as possible. There is no end to the rapacity of most native servants if they are encouraged.

General

It is always advisable to call on the Resident District Official in charge of an area. He can be of great assistance to a traveller and give valuable and unprejudiced counsel. Local native chiefs and headmen should also be visited and their aid solicited. Many a good Elephant and other game has been brought to bag from such friendly relations.



Plates 87—88

EAST AFRICAN GAME

Top. A GROUP OF GIRAFFES AT CLOSE QUARTERS.

Bottom. ZEBRAS.

TO BE FOUND EVERYWHERE IN THE PLAINS, MIXED WITH THE OTHER GAME.

Game

The game animals of the northern areas of Tanganyika Territory comprise almost all the animals which can be shot in East Africa, and in an area which, including the eastern regions of Muanza province, exceeds 75,000 square miles and includes large open-plain areas, high mountains with primeval forest and much bamboo, dense bush, large swamp areas, and tsetse areas, which, for the present, exclude mankind and domestic animals.

There is a very great range of animal and bird life, bearing in mind that increasing European settlement since 1928 has perforce driven game from lands which at one time held some of the finest game animals obtainable in East Africa.

The following animals are among the principal game of the area:

(1) Elephant: still some good tuskers in South Masailand and in the regions of Mbulu and in the Rift Valley.

(2) Buffalo: widely spread in large herds, with some splendid heads of varying types. The writer has shot many Buffalo bulls varying from 42 to 52½ inches spread.

(3) Rhinoceros: many good horns have been obtained in the Rift areas and in Masailand.

(4) Hippos: widely spread; numerous in the Rift Valley swamps and on the Ruvu (Pangani) River.

(5) Eland: large herds, widely spread, and good heads.

(6) Roan Antelope: on the Rift near Mbulu.

(7) Greater Kudu: in Masailand and on the Rift's wall; fair heads.

(8) Sable Antelope: in the extreme south-east parts of Masailand; small herds and small heads.

(9) Wildebeest: very numerous and good heads.

(10) Coke's Hartbeest: very numerous and good heads.

(11) Topi: in Eastern Muanza.

(12) Grant's Gazelle: widely spread in Masailand.

(13) Waterbuck, Defassa, and Ellipsiprymnus: in the Rift Valley and on the principal rivers; fair heads.

(14) Bushbuck: numerous everywhere and good heads.

(15) Thompson's Gazelle: numerous and good heads.

(16) Lesser Kudu (in Masailand): good heads between Meru and Longdo on the flats.

(17) Waller's Gazelle: fairly numerous in Masailand and good heads.

(18) Oryx Callotis: numerous and very good heads in Masailand.

(19) Palla: numerous and good heads.

(20) Reedbuck: Chanler's and common. (21) Duiker: in Masailand.

(22) Steinbuck: in Masailand. (23) Dik Dik: in Masailand.

As far as I know there are no Bongo unless in the forests above Engaruka, in the Rift.

Wart-hog and Bush Pig are plentiful.

Lion, Leopard, Cheetah, Hyena and the smaller carnivora are all to be found in various portions of the northern territory.

Generally I hold the game of the northern areas of Tanganyika Territory to hold better trophies than the Masai areas of Kenya and the Laikipia regions of that colony, in which I have shot and travelled a great deal.

It is a most entrancing region to tour in, and the hunter and traveller need not be disappointed if his guides are good and his energies unimpaired.

TANGANYIKA

CHAPTER TWO

THE FRINGE-EARED ORYX (*Oryx b. callotis*)

By H.R.H. THE DUKE OF GLOUCESTER

ABOUT fifty miles from Arusha to Kondoa Irangi by road there is a place called Kwahuchinja. It has some cultivation, cattle, paw-paw trees and some good water. The country on its western side is flat, with open plains, broken here and there by clumps of thorn trees. There are two water holes used by game such as Lion, Rhino, Buffalo, and several species of Antelopes within two hours' walk of the village. Dense jungle predominates west of the farther water hole.

One afternoon in October I saw a herd of five Fringe-eared Oryx and a large number of Zebras. I was struck by the size of the head of one of the Oryx and thought it well worth while following them up. There was no vestige of cover, so we (the white hunter, my gun-bearers and myself) just walked after them, pretending we had not seen them. The Zebras let us get within twenty-five yards of them before galloping away about a hundred yards at a time, thus alarming and making the Oryx trot off too. (Oryx trot very fast.) After walking for one hour the Zebras, which were between the Oryx and us, turned off to the right. Soon afterwards the Oryx did likewise, and as it was getting late I decided to risk a shot. The animal was walking down a bank broadside on at about three hundred yards' range when I fired. I broke its foreleg, and fired two more shots as it galloped off, a good last of the herd.

They did not go far before they huddled up with the Zebras, which got more in the way than ever. After following them up for another half-hour and growing desperate as the light failed, my white hunter hit it again and I was able to finish it off about ten minutes before dark. We then found it was a cow with a quite exceptional head, the horns measuring just over 35 inches.

We expected to be miles from camp, but had been walking in a circle round it, so got back in about a quarter of an hour, tired and thirsty, but very pleased.

Editor's Note.—This is a wonderful head for a Fringe-eared Oryx, whose horns seldom go much over 30 inches, and are not so long on the average as those of the typical Oryx Beisa.



Plate 89

TANGANYIKA

FRINGE-EARED ORYX (CALLOTIS) SHOT BY H.R.H. THE DUKE OF GLOUCESTER BY
WHOSE KIND PERMISSION THIS PHOTOGRAPH IS REPRODUCED.

TANGANYIKA (Continued)

CHAPTER THREE

HUNTING IN NORTHERN TANGANYIKA TERRITORY

By MAJOR E. D. BROWNE, O.B.E.

WITH a Masai guide and gun-bearers I left camp at 5 a.m. to climb the mountain Ncanby, a peak of some 6000 feet, our camp being about 4500 feet up. The going to the base of the mountain was easy, and by lantern light we avoided the thorn bushes, burnt scrub, and holes, and by dawn were well on our way up the slopes of Rotiena, which consists of two separate peaks with much rock outcrop, though not densely bushed except in the ravines.

We had climbed to the summit of the western peak to get views of the ground below us, when we heard the call of a Kudu bull not far off. Carefully moving in their direction to avoid being seen, for it was now 8 a.m., I saw my quarry with an entourage of five cows standing by a small water hole. Firing downhill is ever a risky proceeding, as it is so easy to misjudge the range and fire high. The best position I could secure for a shot was by crawling through some bushes and lying down on a rock sloping away from me, thus adding to my chances of a miss. But I dare not approach nearer. A moment's pause to regain normal breathing, for I was affected by the climbing and the suspense of a desire to obtain the Kudu—and I took a shot at his shoulder. He went down, at once, shot, as it afterwards transpired, through the spine, though, to make sure, I had another shot which hit him just above the near side elbow.

We clambered hastily down towards our Kudu, lying where he had fallen, and the five Kudu cows moved off only a few yards. They waited, looking in the direction of the bull, wondering why he was unable to join them. A finishing shot and all was over. The first shot was about two hundred yards' range.

He was a fine mature bull, 38 inches on the straight from base to tip of horn, and 28 inches between the tips. My experience of Kudu in Masailand, both in Kenya and Tanganyika Territory, was that although very scarce, they were fairly easy to get to, being not at all afraid of the Masai herdsmen or flocks of cattle and sheep which often, especially in the dry season, ranged over ground which the Kudu also fed upon. Once disturbed, however, they were difficult to come up to, as they invariably took to denser bush. One marvelled at the way in which a bull Kudu was able to go at speed through dense bush and thorns, with an outstretched head and horns behind him.

In the bush country of Masailand there are many Lesser Kudu with good heads, but they are shy animals, and so hard to get.

I recall one successful occasion and also one partial failure, for on the latter I failed to secure the full trophy. We were encamped at the foot of a small stony mountain covered with dense bush and with sansevieria, the latter a devilish obstacle to the hunter, for it must be traversed very slowly. It is well to follow a Rhinoceros or Giraffe track, otherwise the sharp points of the fibre may easily cause a serious wound and subsequent blood poisoning.

In the evening I sallied forth to search for a Lesser Kudu. We had seen their spoor and were aware of their presence by local information.

The bush was so dense at the base of the mountain that we found it easier to climb on to large rocks and sit there for a time waiting and watching. In this way I obtained a rather hurried shot at a bull which went off after being hit apparently low in the shoulders. We followed him until dusk, but could not come up to get another shot. Early next morning, as it was close to camp, we resumed our spooring of the Kudu, and, not far from where we had abandoned the chase the night before, we found the remains of our Kudu eaten by a lion, a male at that, for we found mane hairs on bits of the carcass. The horns were intact, a fair size, but the skull had been eaten. That evening I had better luck, and shot an average male in this locality, where they are scarce.

It is a beautiful creature, the Lesser Kudu, and one always felt pangs after slaying him; but they are elusive animals and good heads are rare in Masailand.

Eland is the most splendid of the great Antelopes. It is ubiquitous in its habitation of plain, hill, and forest country, and is widely spread all over Masailand. In Tanganyika Territory the herds are often large, and I have seen sixty to seventy Eland in a herd, usually with one massive bull, slatey grey in the forepart of his body, with a tremendous dewlap, heavy in fat and flesh. One would suppose nothing could be easier than to run them down on horseback (a method I never at any time employed, invariably hunting on foot). It is, however, not so, for if an Eland is pushed to the extent of abandoning a trotting gait he will go on far ahead of the hunter and his followers. There being many Eland, and, as they are keen sighted, a successful hunt is not as easy as it would seem.

I have shot many Eland, and, as the thrills experienced do not seem to imprint themselves on my memory, I can but record a few occasions when good Eland were bagged. I have found when shooting any game, but especially Eland, when several bulls are running together, it was essential to count the bulls before beginning the chase. Otherwise one was apt to shoot a second bull, mistakenly supposing that one had missed the first.

I recollect two occasions worthy of record.

Once, in the Fly Country south of Arusha, I had gone with my friend S—— on a short shoot. We had made our camp on rainwater pools, close to a large plain. While the tents were being pitched, he and I walked along the stream bed, almost immediately disturbing two Lions, engaged, we thought, in stalking some Giraffe feeding off the acacia trees in the vicinity. We failed to get a shot at the Lion, so headed for the plain, to shoot some meat for the porters of our caravan. We had hardly emerged from the thin scrub on the edge of the plain, when we saw some Eland and two or three Oryx *Callotis* (fringed-eared). Neither of us



Plates 90—91

EAST AFRICAN GAME

- Top.* IMPALA ON THE PLAINS. ONE OF THE COMMON BUT MOST GRACEFUL BEASTS IN AFRICA, WITH VERY HANDSOME HEADS.
- Bottom.* ELAND GRAZING. A COW, WITH CALVES, OF COMMON ELAND, GREATEST OF ALL THE ANTELOPES. NOTE HOW SLENDER THE HORNS ARE, THE HORNS OF THE BULLS ARE MUCH MORE MASSIVE.

desired Oryx, though they carried good horns. They were, I believe, females, and in Tanganyika Territory the female almost always seems to carry a longer, if more slender, horn.

S—— and I chose our respective Eland, and, without any difficulty, brought both to bag not far from camp. In fact, on hearing the first shots, the porters appeared on the edge of the plain, in high hopes of their share of our successes. Both the Eland had good heads of about 26 inches on the straight. I remember this camp was particularly good for birds, and we shot numerous Spur and Guinea-fowl while there.

There were also many Rhino in the locality, but the sansevieria was atrocious, and neither of us desired a Rhino at that price. As the region was a tsetse-fly one, we were undisturbed by the cattle herds.

On another occasion I had the extreme good fortune to shoot a Sable Antelope and the finest Eland bull I have seen at shootable distance. It was thuswise:

I was on an extended tour of the boundary of Masailand, in the south. The country was open and well stocked with native herds of cattle, and on most of the permanent water holes were small villages of agriculturist natives, so that game of all sorts, except Giraffes, was very scarce.

We had arrived in camp in heavy rain; nevertheless, with an ardent desire to climb every hill and mountain in the areas I visited, I had gone out to view the land. We had been told we might see Roan or Sable Antelope in the locality, and that was an additional lure, for until then I had never seen a Sable.

On the mountain slopes long green grass with scanty bush prevailed, and we saw a herd of large Antelope which we all thought were Roan, so we went in pursuit; but they saw us and cleared off at speed, and we returned to camp empty handed, with no especial regrets, for I had shot good Roan in the Moulu regions.

It was often a habit of mine, when we had a defined track to another camp, or, if I knew the route, to start off ahead of my caravan. It was well I did so the next morning, for, leaving at dawn, we came upon, I believe, the herd we had disturbed the day previously. From their size and the colour of the only bull with the herd, it was evident we had happened upon Sable.

I got a fairly easy shot at the bull. It was surrounded by cows with their bright brown colouring and decided manes, in contradistinction to the bull, which is very dark indeed, with a white belly and flank markings. The bull was a fair head, nice and thick, of 36 inches; not bad for Tanganyika Territory, where the Sable carry small heads.

I was delighted and still think of that red-letter day.

The next day was a Sunday and we did not move our camp, so off I went with a guide and a gun-bearer to climb a rather high hill in the vicinity of our camp. It was a drizzly wet day, rather overcast, and, in consequence, cool and pleasant.

One hour from camp in open, rather clumpy bush, I came on a single bull Eland and got him without any trouble. He was easily the best bull I have ever shot, was in magnificent condition, and carried an even pair of horns, 28 inches on the straight.

And so, two splendid animals in two days in a region thinly occupied by game!

It was my fortune to shoot several Cheetah in Masailand. I was always rather sorry when it was all over; they never put up any fight for life, and in death seemed so beautiful in colour and form. However, they are quite numerous in Masailand, so perhaps it was a forgivable affair.

With my usual ardour I spent a day, when camp was not being moved, climbing a mountain, and while on the top espied four what we first took to be Lioness and then knew were Cheetah.

They did not await us but made off just in the way Cheetah do, stopping from time to time to look back and watch their pursuers.

When a Cheetah looks back he often exposes his shoulder, and consequently becomes a rather easy shot, so I was able, on this morning, to shoot one good Cheetah, a female. Her end was swift and she made no attempt at all to attack, indeed I have never known a Cheetah do so.

On another occasion I was returning by car from inspection of an outlying station in Masailand, when we came upon two Cheetah feeding upon a dead Gazelle by the roadside.

I had with me a not-too-intelligent office messenger, who was much more apprehensive of the Cheetah than was necessary.

It is curious how game of all kinds will stand and look at a car, so I was easily able to account for the two Cheetah without leaving it. But the important thing was to mark them down in the rather long thick grass where they fell, and although I left the messenger in the car to aid me in this matter, we lost one Cheetah for a time.

However, by putting a handkerchief on to a stick near the one animal's body, and circling therefrom, we found the other. They were fine skins, both of them.

And now for a brief account of the last four Elephant I have ever shot or probably ever shall shoot. They were tremendous occasions in one's life, and gave a real thrill as only an Elephant can, a thrill which surpasses entirely the thrills obtained in shooting any other big game.

It was in South Masailand, in dense bush country with intervening plains, a good game country, and, in the dry weather, especially good for Elephant. I may add that the guides there are unusually good.

We had awaited the call of our guides, M—— and myself. It came rather late in the day, but we responded and reached our camp after midday. My companion was in much better physical condition than myself, as he did not have to adorn the office chair as much as I did in latter days. However, if the flesh was weak the spirit kept me going.

Well led by native guides, we reached a place on the edge of a wood where nine Elephant had been located. It was 5.30 p.m., and so only about half an hour remained in which to obtain a shot. The Elephant were very accommodating, and came into the open and enabled me to pick out the two best bulls. I shot number one, which collapsed at once. He was immediately surrounded by some cows which did their uttermost to prop him up, and take him away to safety.

They could not do so, and it was intensely interesting to watch the herd. For a few moments they were undecided, and then, led by the other good bull, they were off in grand parade and in single file. I got two good shoulder shots on the leader, and he went about a hundred yards only, to collapse dead.

The first bull was found lying on his knees, head in air, also dead. Their tusks weighed, respectively, 118 lbs. and 125 lbs. the pair, quite good work for one evening. So back triumphantly to our bush camp.

Early next day I returned alone to the station, intending to take some tins of water in my car to our own Elephant camp. I never completed my intention, for, on arrival at the station, I found a guide awaiting me. He was anxious to take me to another place, in the opposite direction, where, it was said, a very good bull had watered the day previously, so might reasonably be expected to do so there again that night. So off I went with my guide, taking no camp outfit at all other than a few essentials borrowed in the station. We camped near the water, and, after all the fires were put out, I slept fitfully until dawn.

Then the guides came with news that the Elephant—a single bull—had watered, so we took up the spoor. None but an expert could have followed it, because, in the early hours a herd of Masai sheep had walked over the spoor. Quite undeterred, my guides followed and found that our bull had debarked a tree, chewed the bark, and spat it out in lumps. We were then close to our quarry.

We were in rather thick, very dry low bush, hence noisy underfoot, but the Elephant decided to take a stand under a low, dense bush, in which we could only see his head facing us—a shot I would never undertake if avoidable.

Presently our bull, finding the shade insufficient, moved out and on exposing his flank to me, I got two well-aimed shots to his near shoulder at thirty-five yards. He plunged forward, to collapse almost at once.

I got to him with the least delay to put in two more shoulder shots on the off side, and, without much delay, he died and was mine. Each tusk weighed over 100 lbs. and they were a splendid pair. My friend M—arrived with the caravan to share my delight.

And now for my last Elephant shot in Tanganyika in Moulou, not a big tusker, but a good hunt with good guides. I had almost abandoned hope of shooting an Elephant when this occurred, for endeavours to find one in the areas where I was so successful the previous year were unavailing.

We were camped in the native area, but with primeval forest near by. The guides reported Elephant in the vicinity, but all small, with many cows.

I can still see, in my mind's eye, our leaving camp at dawn to gain touch with guides who were searching for a shootable bull. Our luck was in that day! Presently, on the hillside above us, I saw a native waving the corner of his blanket to attract us. We went to him, to be told that there were two Elephant on a stream in the valley below. We took up their spoor and quite soon were close to them. It was just a chance whether we should get them or not, for the wind was variable and the Elephant separated from each other, and no one knew which was the better bull.

I had to cross the stream, and, if the water had not been making a rippling noise, I could never have done so without disturbing the Elephant, for one of them was just across the ford, feeding on the bush by the stream. We went cautiously across and got to the bush where the Elephant was and had to wait for him to move on downstream, which he shortly did, but I was in mortal terror, for another Elephant was upstream, above us, and we feared he must get our wind.

When the Elephant moved we went up the bank, round the bush, and there was our bull, rubbing his tusks in a huge ant-heap within twenty yards of us. It was an easy shot and I put two bullets into his offside shoulder. He went off at high speed downstream, and, having gone about one hundred yards turned to face us, but shortly collapsed and died. Each tusk weighed 47 lbs. And so my last Elephant in Africa.

The story of two Hippo is of interest because they are not always easy to get, nor always good trophies. I was on local leave in that vastly interesting region on the extreme western boundary of the northern province of Tanganyika Territory, where the alkaline lakes are predominant features. We were camped on the banks of a stream flowing to the eastern shore of the largest alkaline lake in the area, Eyassi, quite fifty miles long. It is in desolate, tsetse-fly stricken country, well watered and full of game.

I did not imagine I should get two Hippo so easily. I left camp, still being pitched, and went into the long grass regions near by, but did not expect to shoot anything, as the sun was then well up in the heavens. We got to a Hippo run, and, while standing there, a big bull Hippo came up the run towards us. I waited until he was almost alongside us, when I put a shot into his brain and that Hippo was mine.

I then returned to camp, close by, and, while waiting for lunch and while the carriers were out collecting wood for fires, one porter disturbed two Hippo, which came blundering past our camp on the far side of the stream, which was deep and narrow. I just managed to cross the stream and up the far side bank, when the Hippo appeared in the wide open space at a gallop. We made no mistake and the Hippo went down a little further on.

It was a curious region, very undisturbed, for we saw Rhinoceros in the broad open plain feeding with other game. It is just as well that some places are difficult of access as this part is.

PART TEN

NYASALAND

CHAPTER ONE

GENERAL

By RODNEY C. WOOD
Game Warden

NYASALAND to-day is emphatically a country where quality of trophy, rather than quantity, should be the aim of the hunter. Its animals most worthy of the attention of the true sportsman are most often found in thick bush country or jungle-patches, and their successful hunting will tax all his bushcraft and hunting-lore. Therein lies its charm.

It is poor sport to find animals in hundreds on an open plain, and perhaps after the expenditure of much ammunition at long range, to succeed in bagging a passable trophy of some common Antelope. In Nyasaland, with its dense population, animals really worth hunting can be wary in the extreme; thus the worth of a good trophy when brought to bag, is correspondingly enhanced.

The larger animals are: Elephant, Rhinoceros, Hippopotamus, Buffalo, Nyasaland Gnu, Eland, Kudu, Roan, Sable, Waterbuck, Lichenstein's Hartebeest, Nyala, Impala, Puku, Bushbuck, Reedbuck, Cape Duiker, Nyasa Blue Duiker, Red Duiker, Oribi, Sharpe's Steinbuck, Livingstone's Suni, Klipspringer, Burchell's Zebra, Wart-hog, Bush Pig, Lion, Leopard, Cheetah, Serval, Civet, and other small Cats, Spotted Hyena, Hunting Dog, and Jackal.

Elephant do not run large, very few tuskers now being found over even forty pounds per tusk. During the last few years it has been necessary to institute measures to endeavour to confine all Elephant to certain areas or Game Reserves, so as to give protection to the vast native cultivation of the Protectorate. Results are beginning to show that this may be possible, but there are still many bands of wanderers, mostly cows and calves, sometimes young bulls or even some lone large tusker, that roam over large areas of the country. The visitor is therefore well advised to take out a licence to kill one Elephant (costing only £10), over and above the ordinary game licence, so that he can hunt one of these big tuskers, if met with. The licence fee is refunded if no shot is fired at any Elephant during the time of its validity.

Rhinoceros are very scarce in most districts, though still to be found in several of the more remote parts of the country, such as in the Dowa and Kota-Kota districts. They are protected, but one may be obtained on a

visitor's full licence or on a special licence, the latter costing £10 but issued only on certain conditions.

Hippopotamus are numerous in Lake Nyasa, but usually their hunting is very difficult owing to their predilection for dense reedbeds in which they hide themselves throughout the day. On moonlight nights they may often be seen among the lake-shore rice gardens or other cultivation near by. They are also found sparingly in the larger rivers.

Of the Antelopes and other animals certain species are very local in distribution, but if time is no object to the hunter, he can be certain of obtaining heads of nearly all. A few notes on some of the more interesting may not be amiss.

The Nyasaland Gnu is now very rare indeed, being only found occasionally in one small locality by Lake Chilwa on the borders of Portuguese East Africa, from where they undoubtedly come over. Probably none are actually resident within our borders throughout the year. This animal may now only be shot on a Governor's licence, granted solely for scientific purposes.

Lion and Leopard are very numerous, and even in quite settled and civilised districts are common. The former are great wanderers, ranging in and out of large areas, doing little harm to man or domesticated animals where game is plentiful, but often becoming a terrible scourge where wild game is scarce and they are forced to raid cattle or even turn man-eaters. Hardly a year passes without man-eating breaking out in one district or another, so Lion have to be classed as vermin in a thickly populated country such as this, and may be shot without licence. Leopard generally stay where there are hills and mountains. Although they sometimes do damage to calves not properly tended and to native goats, thus bringing upon themselves the execration of the community, it is probable that in reality they do much more good than harm, as their favourite foods are Baboons, Monkeys, and Bush Pig, all of which are a scourge of cultivation throughout the country. The records of them attacking man are very few, and in such cases it is always subsequently shown that they were molested first in some way. Although they are still classed as vermin, it is the writer's opinion that they are definitely beneficial, and the person who kills and traps them on all occasions (actually in almost all cases for the sake of their skins, although one is generally told that it was done for the sake of the local natives!), is doing a serious harm to the production of crops in that locality.

The Cheetah has so far only been found in the Central Province of Angoniland. Even there it is seldom seen, but may be more numerous than is believed at present, as it is nearly always confused with the Leopard by the natives, and called by the same name. Its true local native name is "kakwio" (Chichewa dialect). This part of the country is characterized by the open rolling plains, with large "dambos" or vleis and scrubby bush, which suit its methods of hunting by sight, whereas in the thick forests it is never found.

Spotted Hyena run very large, the writer having obtained one male near Chiromo weighing 172 pounds. In certain places, such as the south-eastern side of Lake Nyasa among others, they sometimes attack natives who are travelling and sleeping in the open, often inflicting very serious bites, and are in general far less timid than in other parts of Africa. The

writer has known one dash in among over twenty men sleeping round camp fires in close proximity to his tent, actually falling over a tent-rope twice within a few minutes, despite burning brands being thrown at it on the first occasion, and finally creating absolute pandemonium in the camp until shot at and thus frightened off.

Burchell's Zebra are nowhere very numerous though often seen in Angoniland and in the Lower River districts. They are entirely harmless to man and crops and are protected, shooting of a specimen being only permitted for scientific purposes under a Governor's licence.

Eland, Kudu, Bushbuck, and Nyala are the four animals whose horn trophies are unexcelled by any other country. Without quoting actual records of each, it may be stated that bull Eland heads are frequently found over 32 and occasionally over 34 inches. Kudu exist in numbers over 54 and frequently over 56 inches. Of Bushbuck practically all the finest known heads have come from Nyasaland, from 18 to 21 inches, and heads over 16 inches are fairly numerous, while over 14 inches are common.

Nyala stands in a class by itself. In our borders it is only known to exist in two localities, near Chiromo and near Chikwawa. In both places their numbers are very limited and Government has wisely proclaimed their breeding-haunts as Game Reserves. But animals are often found at certain seasons outside the boundaries of these reserves. One bull is allowed to be shot on a visitor's full licence, at any place outside the Game Reserves. There is therefore a reasonable chance of obtaining one provided the hunter has ample time to persevere. It becomes then a matter of sheer good hunting, unless Fate is exceptionally kind in the way of luck. The writer knows of one visitor who obtained a really good head within two or three hours of arriving on the scene of their haunts, whereas in his own case week-ends were spent regularly for two years, before the chance of making an instant kill came along. Parts of thirty-two animals had been seen up to then, but none offered the certainty of the shot that drops the animal where it stands. Then the thirty-third was found where expected, one morning at dawn, but only after experience and observation had taught the hunter the secret of one of their habits that makes the finding of one a certainty. To wound one in the jungles in which they live is to lose it in almost all cases, so the greatest care has to be taken to obtain a dead shot. The chance shot "in hopes" is simply criminal at all times, but in particular perhaps against in the case of this very rare and little-known animal. There is a most marked disparity between the sizes of the sexes, the females being hardly any bigger than a female Bushbuck, whereas the bulls are half-way in size between a Bushbuck and Kudu. With their long fringes of shaggy hair and white spots and stripes, the bulls are truly magnificent animals. The cows are chestnut-red and hornless. A good head runs between 27 and 31 inches and is the "trophy of all trophies" from this country.

(An account of Nyala hunting will be found in the next section.)

Nyasaland can be reached by train from Beira, and during the dry season, from April to November, by motor road from Salisbury, Southern Rhodesia, via Tete on the Zambezi River. There is also an all-weather road from Fort Jameson in Northern Rhodesia, which runs through Fort Manning, Lilongwe, Dedze, and Ncheu to Zomba and Blantyre. In the

dry season it is now possible to reach all parts of the country by motor transport.

The long grass makes shooting very difficult during the heavy rains and for some three months following, as it is rarely burnt off until August. In certain districts, however, such as the Lower River areas, it never grows as tall as in the Central Province uplands, where it becomes head-high. June and July are very cold at night. The first rains usually fall in October or November. Green grass springs up everywhere, and as the first rainstorms fall, conditions become ideal for hunting, though at the lower levels, such as the shore country of Lake Nyasa and the Lower Shire valley, the heat is then great. But in these areas large spreading trees of many kinds provide delightful shady camp sites and hunting is mainly done in the early morning and after 3 p.m.

After each shower of rain, hunting conditions are at their best, as tracks of all kinds are then well marked and the largest animals easily picked out and followed. Every moment then, one realizes the real delight of the chase as the spoor grows fresher before one's eyes. The quality of the possible trophy may be gauged by the track, a delightful contrast to the frequent rather aimless walking about over miles of country in the hope of coming upon some herd, which is the only way in many places before the grass is burnt, and when the ground is too hard to show tracks clearly.

By January the grass is beginning to be long again, though this varies in different districts, and the heavy rains setting in, make travelling very difficult anywhere off a main road, except on foot with porters.

With commercial development proceeding apace everywhere, it is often very difficult now to obtain porters for any long safari on foot, but usually the prospect of some meat brings volunteers forward readily in any village for the move on to the next or for a day's journey. These will often be women, who are very satisfactory for these short trips, but will not, and cannot be expected to, come so far that they cannot return to their own village again before sundown of the same day. As it is so easy nowadays to get into the very heart of all districts by motor road, this difficulty of obtaining long-distance porters is not one that should prove serious to the success of a hunting-trip.

Good gun-bearers and trackers are very rare. At each village several young men will always come forward and say they know all about everything there is to be known about the local game haunts and hunting, but bitter will be the experience of the visitor who trusts to them. In these days of "education" all the old bushcraft knowledge is being lost rapidly, and it may be stated without fear of contradiction that the younger generation know nothing of either animal or bird or bush-lore. Even the very names of everything are now muddled up, and it is wise to be sure that the person giving information really does know the correct animal one is discussing! As an example, the local word "chilembwe" is used by the Achewa of the Central Province to mean either Roan or Sable, whereas in reality it should strictly refer to only the former. As for any hunting ability—it is just non-existent. Their idea solely confines itself to "bargaining about" in the bush in the hope of stumbling across game of any sort, "meat" being the prime consideration.

Some of the older men still remain "uncivilized," and if one of these real old gentlemen can be found in any village, he will assuredly prove of

great help in the immediate vicinity. These old men spent their youth in the pursuit of game for their stomachs' needs, and for their very existence in years of drought and crop failure. Usually they hunted only with spear or bow or trap. They did not spend their time in village schools learning a smattering of the three R's, a useless attainment for them in their struggle for existence. It is sad to think that in another decade or so all of them will have passed from Nyasaland—their lore and crafts of the chase gone with them.

Plenty of natives can be found with sufficient knowledge of English to serve as interpreters or personal servants, but the visitor will be wise to assure himself that any applicant for such posts is reliable and honest. "Books" are not always to be trusted, as they might be borrowed for the occasion, and personal reference to the local police or District Commissioner is a safer course, possibly saving much subsequent trouble when one has got away into the wilds. If these precautions are observed, really excellent servants can be obtained, it being generally conceded that the Nyasaland native has a special aptitude for this work.

Those contemplating a long trip will find a little knowledge of Chinyanja, the *lingua franca* of Nyasaland, very useful. An excellent little book for this purpose is Sanderson & Bithrey's *An Introduction to Chinyanja*, or Hetherwick's *Manual of the Nyanja Language*.

Within the next two or three years it is probable that Nyasaland will be so much further advanced that enterprising firms will contract to outfit shooting parties and convey them to any part of the country. At present it is better for the prospective hunter to bring in all his own gear except foodstuffs. Tents, second-hand rifles, and other camp gear can be obtained occasionally, but the supply is too uncertain to be relied upon. Blantyre, Limbe, and Zomba are the main townships where all ordinary food supplies, kitchen utensils, and suchlike minor items can be obtained at all times. Small stores also exist at many of the lesser settlements such as Fort Johnston and Lilongwe, but their supplies are uncertain. So if tents, camp furniture, and rifles are brought, the remainder of the outfit should be purchased in Blantyre or Zomba.

Cars and lorries can be purchased there too, but if preferred contracts could be made with leading motor transport firms for the trip. In this case arrangements should be made well in advance. On all such points the Government Publicity Office in Zomba, the administrative capital, would supply further details on request. Hotels are available at Blantyre, Limbe, Zomba, Fort Johnston, Bedza, and Lilongwe.

Everywhere the scenery is magnificent and it is hard to single out any particular spot for special mention where such varied types exist. In North Nyasa the great Nyika Plateau rises sharply to over six thousand feet above the lake level. Mountain torrents dash down in every valley, and game is plentiful. The backbone of the Protectorate to the south of this mountain-mass, is mainly high open rolling country where game is scarcer until the Kasungu district is reached, all the western area of which district forms the Kasungu Game Reserve. Coming southwards over the Bua River forest country of an open type predominates, with much game throughout the Fort Manning, Dowa, and Kota-Kota districts. Lion are very numerous in these parts. Lilongwe and Dedza no longer hold much game, and it is interesting to note that Roan Antelope are not found

south of Dedza, whilst Sable get progressively scarcer as one goes north from the Bua River.

All the lake-shore country on the western and south-western sides of Lake Nyasa teem with game as far as Fort Johnston. Camping anywhere in this area is a real delight, the lake water being fresh and good, and fishing is also obtainable. One or two excellent varieties of fish for the table are always to be had—a welcome addition to the menu. In many parts bathing is possible, but in others the numerous Crocodile of large size are apt to be a discouraging factor!

Game is now scarce in the heavily settled districts round Zomba and Blantyre, Cholo and Mlanje, but becomes moderately plentiful again in many parts of the Chikwawa and Lower Shire districts. Here are found the best average Eland and Kudu heads, and also the Nyala.

Speaking generally, as a rough guide from the viewpoint of trophies, if we draw a line east and west, through Dedza, the northern half of the Protectorate gives us Elephant, Rhinoceros, Hippopotamus, Lion, Buffalo, Roan, Sable, Eland, Waterbuck, and Hartebeest in greatest numbers, whereas the southern half has a greater abundance of good Eland, good Kudu, excellent Bushbuck and Reedbuck, Impala and Nyala.

An attractive pamphlet on Nyasaland can be obtained from the Government Publicity Office, Zomba, giving further details of this most alluring country.

In a country where native development is proceeding apace, it becomes more and more difficult to retain the wealth of larger game animals that formerly roamed over all this part of the world, but it will be a long time before all the game has disappeared from the more remote areas where either the physical features of the country make it unsuitable for development, or the tsetse-fly scourge still reigns supreme. There must always also be a leakage of animals from the Game Reserves, so we can confidently look forward to many years of good hunting of some of the most fascinating species of great game in existence to-day.

NYASALAND (Continued)

CHAPTER TWO

NYALA HUNTING

By RODNEY C. WOOD

HUNTING one of the rarest Antelopes of Africa should rightly be a matter of some difficulty. Putting aside that amazing stroke of sheer good luck which occasionally falls to the veriest tyro, he who hunts the Nyala (*Tragelaphus angasi*) will, in the ordinary course of events spend many hours, or even weeks, in vain search for a bull carrying a trophy worthy of such a magnificent animal.

But in what wonderful and fascinating places will be his hunting! Only the very densest jungles that Central Africa possesses remain the home of the Nyala, and in Nyasaland there are only two such places known, each of only a few square miles' extent.

Most members of the Tragelaphine sub-family of Antelopes are noted for being wary, and it is generally conceded that the Kudu has little to learn on the subject of looking after himself. Compared with the Nyala the Kudu is only a beginner! The colouring of both animals is well suited to their surroundings, being well camouflaged with body stripes and spots. But the adult Nyala bull is probably one of the finest examples of protective coloration among all Antelopes. His dark blackish-grey coat with its shaggy fringes blends with the deep gloom of the thickets where he lives, and the prominent white vertical body stripes effectively break up the mass-contour, while the large white spots and lighter brown patches on head and legs paint him as one with the light and shade of the foliage, where occasional sunbeams break through the forest roof and glint on the leaves of the undergrowth. In such jungles it is often easiest to see any object by lying down and peering below the foliage of head-high lower growth, as the carpet of dead and decaying leaves and the deep gloom smother any ground-growing flowers or grass. Here again is seen the wonderful protective value of the animal's markings, the lighter leg-patches completely destroying the outlines of what would otherwise be four symmetrical objects.

Haunting the thickest of the jungle throughout the daylight hours, the bulls only venture on the outskirts of the forest during the night. They may sometimes be seen after sundown, during those peculiar few minutes of the tropics when day slides into night and twilight can hardly be said to exist. At one moment it is light—there is nothing to be seen in the open glade forming a bay at the jungle-edge. A few minutes later—the shadows play tricks with the eyes. Is that the broken outline of a bull just on the very edge, or is it just bushes? An incautious step in one's

haste to get just a little better view—and a small twig snaps. There is hardly a sound, but the shadow has disappeared. Magic? . . . Yes, magic—but it *was* a Nyala bull!

In strange contrast to the wariness of the bull is the behaviour of the females. At first it will hardly be believed that they can be the cows of the same species as the bull. They are bright red in colour, and appear to be only the size of a Bushbuck, whereas the bull is a good half-way between the Bushbuck and Kudu. But the prominent and broader white stripes and the spot-pattern distinguish them from Bushbuck. Whereas the bull takes every care to keep to the thickets during daylight, small parties of five or six cows will often be seen out in the open forest along the edges of the main thicket-wall, after three or four o'clock in the afternoon, even before the sun has set or such places are in shade. Furthermore, they behave just as Bushbuck ewes, near whom or among whom they may even be feeding. They will often, on seeing some movement, stand to examine a person carefully, without first dashing into cover, and then stopping when well concealed, as the bull would have done. This may occur even when the hunter is at the closest range.

As with the Kudu, the Nyala's track is very small for the size of the animal. That of the female is little bigger than the Bushbuck's and may easily be confused with it. It is only half the size of the bull's.

The essential of Nyala hunting is slow movement and absolutely silent approach. When a party of cows are seen near a thicket, very careful and minute examination of the edges of the thicket wall near by may sometimes reveal the bull, or rather a part of the bull, as he will nine times out of ten be covered almost completely with foliage. In such cases a hasty shot should never be taken. It is essential to await some movement on his part whereby his exact position and shape may be revealed. If the cows are unsuspicious, and the hunter himself well camouflaged and concealed, sooner or later the bull is sure to step out from the jungle foliage for a few moments anyway. Then is the time for the shot, which must be very carefully placed, and from close range to make certain of a clean kill. To wound an animal in such surroundings is only to lose it in the impenetrable tangle of the jungle, where slight blood-spoor is soon lost and the damp thick covering of dead leaves gives no sign of the animal's slow passage. If wounded, and able to escape from man into the thickets, the animal is almost certainly doomed to be killed by the Leopards which haunt such spots, or Hyenas prowling through them nightly. A magnificent trophy is then lost, and another of one of the rarest Antelopes has gone uselessly, through a man's stupidity and lack of skill in hunting, or in his failure to control and master his "buck-fever." This fact should ever be in mind from the moment of setting out on the hunt. It will contribute as much as anything to a successful issue. The author of this article had hunted Nyala over a period of two years, and had seen parts of bulls on some thirty-two different occasions (probably often the same animal) before the great day dawned with a perfect shot and trophy.

The African Hunting Dog (*Lycaon pictus*) must take heavy toll of Nyala in Nyasaland. On several occasions I have found skeletons of both sexes which would appear to have been killed by them, and early one morning found them at the very deed. My native gun-bearer and I were creeping along the thicket edges as we had so often done before. In front of us

rose a small mound, an old ant-heap worn down and weathered, and from beyond it came sounds of scuffling and crunching. Creeping up the mound carefully, well hidden by the stems of burnt grass and bushes, I found a pack of fourteen Hunting Dogs pulling to pieces a cow Nyala only fifteen yards or so from me. A shot dropped one dead. The rest dashed off, but recovering from the sudden panic into which the shot had thrown them, stopped at thirty or forty yards' distance. Turning round after a few moments of indecision and looking in all directions, they lined up facing me again over a front of perhaps forty yards. At that moment number two fell dead with a chest shot. The rest seemed not to notice after a momentary pause again, but started a slow and deliberate advance towards the carcass and myself.

Individuals frequently stood up on their hind legs at intervals in their endeavour to get a better view of the strange *shape* exciting their curiosity. I was well camouflaged as usual with a shirt of patches of different shapes and colours, twigs of leaves being fastened on my hat and over one shoulder to break up the even outline. Squatting motionless on the ant-hill, except to slip another cartridge into the barrel from the magazine, it would be difficult for the Dogs to recognize the shape as a man. By the time they had passed the carcass of the Nyala again two more were dead, and only a slight check had been perceptible at each shot. With my fifth and last shot before the necessity for reloading the magazine I failed, only hitting a Dog in the flank and hind leg. He let out a terrified howl, and, as I rose up to meet them if they still pressed on, all panicked simultaneously and dashed off at top speed. I am certain they had no intention of attacking me, but their natural curiosity kept urging them on in the face of a danger they probably did not realize.

A short time later a friend of mine found another pack, or the same one again, with a Nyala kill very near the same spot. This time it was a bull. Years later, when the two main haunts of Nyala in this country had been proclaimed Game Reserves, other people have often told me of the presence of packs, or a few individuals, harassing game of all kinds there. Also natives have brought in horns of Nyala found dead and presumably killed by Dogs. They are a terrible scourge in that forest country surrounding the main jungles, with their persistent and clever methods of hunting, in which they show almost incredible intelligence. Other animals rush from the district in panic, and so, I suppose, the Dogs turn to the thickets, knowing that the Nyala will not leave them. I do not think they could ever pull down a Nyala right inside the thickets, but the kills take place by rushing a herd when on the outskirts. Some of the Dogs approaching first along the inside, while the rest of the pack creep up and surround the herd from the more open forest. The rush of these sends the herd flying to the thicket and there the other Dogs at the edge seize any animal coming by them.

As mentioned before, Leopards make a permanent home in these jungles, feeding in all probability chiefly on the Baboons, Mozambique Vervet Monkeys, and White-throated Grivet Monkeys which abound, as well as on the numerous Bush Pig and, I expect, smaller animals such as Jumping-shrews and Mice. The giant forest trees of many species afford them their lairs. They must often succeed in killing Nyala, in particular

cows and calves, and, with Hunting Dog, are the obvious natural check to their increase.

On one occasion I was on one of my usual evening prowls in the hopes of meeting the longed-for bull with a head worth bagging. In August or September the long head-high grass in the open spaces of the forest bordering the thickets burns more or less completely. We had got into an unburned patch and were carefully bending aside the grass-stems, one by one, to enable us to get through without producing the tell-tale "snap" of a breaking stem which would have sent every Nyala bull within a hundred yards racing into the thickets. Pausing for a moment, we heard a sudden gurgling grunting noise just ahead. I mistook it for Bush Pig breaking from the cover, but fortunately still proceeded with the utmost caution and silence. As we were just emerging from the long grass, a big Leopard suddenly sprang up on to a vertical tree-trunk, some thirty yards away, in a well-burnt "bay" of the jungle to our right. Lashing its tail from side to side with spasmodic jerks, and growling with anger, it clung to the tree, looking down at something at its foot. I made out an indistinct shape among the broken-down and half-burnt grass-stems, over which crouched a second Leopard. Firing too hurriedly at the Leopard on the tree I made a real bad shot, only hitting it below the ribs, but the tree-bark, rebounding in fragments from the terrific impact of the soft-nosed .375 bullet, seemed to blow its stomach to pieces. Then occurred an episode only too frequently misconstrued, in my opinion. Dropping from the tree the Leopard charged straight at me in tremendous bounds. It was too close for me to think of running, so I stood dead still—I had reloaded instantly on firing the shot—with the intention of firing right into it as it sprang on to me, and at the same time myself dropping to the ground. But at five yards' distance, it obviously caught sight of me for the first time, and the shock was evidently greater to it than to me, as it swerved sharply and passed me at terrific pace only three yards away—whereupon I completely missed it with a second shot! Below the tree were the remains of a freshly killed Nyala cow.

Day after day in our hunts there would be nothing of outstanding interest to note, except the ever-present joy of living among strange birds and small mammals, many of which were always about, but sometimes unsuspected little scenes of their domestic lives would be revealed. Late one morning, when we were returning unsuccessful, as usual, along the jungle edge, a Nyala cow suddenly dashed out of a clump of tall thick unburnt grass perhaps ten yards or so from the main thicket. Now this struck me as very unusual, so I walked slowly up to the grass clump. Well hidden in the middle was a newly born young one. I refrained from handling it, and carefully retracing my steps led the three or four natives, who were following some distance behind, around in a wide detour. Why the mother had hidden her young one *outside* the thickets I cannot imagine, but I hope she returned and removed it to a safer place when we were out of the way again. On another occasion I found an old Bush-buck ram placed by a Leopard *fifteen feet* up in a tree. The Leopard jumped down and dashed off as I was almost underneath, and that is what attracted my attention to it. It had just been killed and was untouched. I was so amazed at this proof of the incredible strength of a Leopard that I took great care to measure the height by sending up a

native with a string we made of bark, which I then measured with the steel tape I always carried in my cartridge-bag. I was sorry for the Leopard, all its trouble being for nothing, as my natives considered this find fair meat for them, and were not even gracious enough to leave the Leopard the intestines!

For several years I lived only a few miles away from this haunt of Nyala, in its main area perhaps some five square miles in extent. On every occasion that I could get away from my plantation work, and they were many, I went into camp at a native village near by, and gradually as the months passed learned more and more of their habits. I knew of a hidden water pool in the heart of the main jungle, and it was there the Nyala went for water at times, but being mainly browsers on the succulent and fleshy leaves of certain shrubby growths and creepers along the forest edge, they seemed to me to be very independent of water, despite the terrible heat of that low country not more than two hundred feet above sea level. Their spoor showed that they browsed every night along the forest edge, but they never appeared to go to any of the pools in a river bed only a very short distance away.

Blue Duiker and Livingstone's Suni were often seen, and more often heard, giving their curious nasal "Nssss" cry of alarm, as they scampered off in the undergrowth, as my native gun-bearer and I crawled on our knees, or wormed our way flat on our stomachs, along the tunnels into the jungle made by Bush Pig and other game. After the first few yards through the tangle of thorny scrub and creepers we were in a land of semi-darkness where grew little ground-vegetation, but only the tangled and intertwining stems of the many climbers and lianas. Monkey-ropes canopied the trees overhead with a dense blanket through which the sun could hardly penetrate. The forest giants broke through this canopy and spread their massive limbs of foliage over wide areas, adding to the gloom. The whole place reeked of moist heat and decay, and often the very air was stifling. Birds and Monkeys used the main canopy as an aerially suspended world of their own, and the forest resounded with their weird cries and yells. Occasionally one would hear the deep roaring bark of a startled Nyala bull—Bo-o-o-o-gh—from which sound their local native name "Mbo" is derived with onomatopœic allusion. An eerie place, but fascinating with an allurements all its own. One came upon little glades here and there where a few beams of sunshine gave cause to some flowers and grass to struggle for existence, and these were favourite spots for the Nyala. One moved as a shadow in this land of shadows, and an occasional twig-snap showed where the Nyala bull faded as a shadow among the tree stems.

Moving along the edges of the vegetation-wall of the main thicket at dawn or dusk, we often saw Kudu and Bushbuck, occasionally Buffalo, Eland, Zebra, or even a stray Elephant. But Nyala were the one aim and object of it all, so little attention was given to other game animals. But always I was noting the ways and habits of the lesser forest folk, and the flowers and the trees, in the hopes of stumbling upon some fact, however small or apparently insignificant, which might point the way to closer acquaintance with the Nyala bulls.

Then, after two years of endeavour and patience, came the knowledge of that link in the chain of their lives which spelt success for the hunter.

Since before dawn we had crept along our usual track, every inch of which was now known so well, and were now, at about eight o'clock, with the sun well up, slowly walking back towards camp through the forest, a short distance from the jungle wall. The fires had been through some weeks previously, though only a poor burn had resulted as they were too early to make a clean sweep. But now several species of trees and shrubs were in flower, giving a sweet perfume to the hot air.

In a somewhat dense piece of the forest stood a large tree with long racemes of purplish-red flowers. Around it was a small open space with comparatively bare ground beneath the tree itself. There had been a slight shower of rain the day before and automatically, without any special thought, I moved to the spot to look at whatever spoor might be marked there. To my surprise the ground beneath the tree was covered with the tracks of Nyala, both bulls and cows, and those tracks were fresh, some showing that a bull *had only just dashed off at our approach*. This was confirmed by droppings that were yet quite moist and warm.

For a few moments I stood looking around, not yet fully comprehending. What on earth were Nyala bulls doing under this tree well after sunrise at somewhere about eight or eight-thirty o'clock in the morning? And relatively so far away from the main jungle mass? . . .

As I stood endeavouring to unravel it, a large flower-petal dropped to ground from the tree. Something was holding me, subconsciously worrying my brain since my arrival on the spot, but the concrete idea was elusive. Another flower fell—and a few seconds later a third. In a flash I understood what my mind was seeking to tell me. I knew the tree well, with its habit of shedding its flower-petals one at a time every few minutes when in full bloom. They were large and sweet-smelling, and I had often noticed native cattle and goats in the villages eating them greedily. Three had fallen while I stood there, *but there were no more lying on the ground!* So the Nyala had been eating them as they fell, and what was more to the point, the attraction was so great that they threw aside their usual caution and stayed by the tree, long after daylight!

I returned to camp, knowing that the long quest was drawing to its end at last.

Long before dawn next morning, I was concealed in a good position among some long grass and scrubby growth near by, having crept up quietly along an approach I had well reconnoitred the day before. Between me and the tree with the flowers, was a stretch of broken and beaten-down grass, hiding from view the bare patch below the tree, but not high enough to entirely conceal the body of a Nyala bull. I carried a double-barrelled .475, as I meant to make sure of a clean kill. Dawn came, but I must wait till daylight before rising without sound to peer towards the tree. Those minutes were hours, but I kept myself in hand. At last I could see objects clearly enough. The great moment had come; broadside on below the tree was the outline of a fine bull. He fell at a shot through the neck, dropped out of sight behind the grass, but recovered again at once and dashed past me, dropping dead to the left barrel only a few yards from me.

The gods of hunting, that had tested my patience for so long, were indeed to glut me that fateful morning. Examining the dead bull it seemed to me that the horns were somewhat shorter than I had thought

on first seeing it. Going up to the tree I found on the bare patch a bigger bull lying stone dead. A few yards beyond him lay a third, killed by the same bullet!

The one killed with my second bullet had been another animal altogether, which must have been lying down at the feet of the first one seen, and had sprung up at the shot, dashing past me in panic and so making me think it was the same animal. The bull, killed with the same bullet as the first one, must have been in the line of the shot, of course quite invisible to me behind the other. Three Nyala bulls with a right and left—it seemed to me horrible. Never before in years of almost daily hunting, had I ever bagged two animals with one bullet, and now for this—and worse—to happen with Nyala was unthinkable. . . . All my joy at the longed-for success had vanished. In its place was a feeling of revulsion against all hunting, when it meant the death of such magnificent animals. Too true I had done it all unknowingly—but why had I done it at all! The “Penitent Butcher”?—Yes, I suppose so!

As I write this to-day, many years later, I find one of these heads still mentioned in Rowland Ward’s *Records of Big Game*. I have never hunted Nyala again, though I have seen them and got far greater joy from watching them. Absolutely unique as this episode must be, yet it showed how easy it is to kill a shy and rare animal such as this, when once its habits are well known. Largely on its account I was, with others, instrumental in influencing Government to make the hunting of Nyala in Nyasaland only lawful on a special licence, and to proclaim Game Reserves of their two main sanctuaries where they breed. So perhaps after all those three glorious bulls did not die in vain!

PART ELEVEN

NORTHERN RHODESIA

CHAPTER ONE

GENERAL

By DENIS D. LYELL

THE following notes will be useful to those who intend to go for a shooting trip in the above territory, and may be depended on, as they have been sent to me by Mr. F. H. Melland, who left the country recently, after spending twenty-six years on the staff of the administration of that country, during which time he had exceptional opportunities of shooting and studying the game. Here are the most important points from his communication:

(1) Motor roads are in existence in nearly every direction. One can get to any good game centre by motor road, *e.g.* to Mpika in the north-east, or to Kasempa in the north-west, and then make up one's "ulendo" (native following.) Carriers can be obtained at such places at about 12s. 6d. a month and "posho" (food, or allowance for food), but carriers for long journeys from point to point are obsolete. After all it is better to go, say, from Broken Hill to Mpika in two days by road (or a few hours by air, for each has its aerodrome), than to take three weeks on foot. Once at a good centre, one proceeds very much as of old.

(2) The best game centre is still Mpika. Here one can get Elephant, Rhino, Buffalo, Eland, Roan, Sassaby, Black Lechwe, Situtunga, Waterbuck, Reedbuck, Klipspringer, etc., and Lion, Leopard, and possibly Cheetah.

(No Kudu or Wildebeest, and Sable Antelope are scarce.)

(3) Round Kasempa one can get Elephant (poor tusks), Rhino, Buffalo, Hippo, Sable (the next biggest to the Angolan variety), Kudu, Roan (scarce), Eland, Waterbuck, Red Lechwe, Yellow-backed Duiker (Governor's licence only), Lion, Cheetah, and a few Leopard. Near the railway line one can still get good shooting; *e.g.* Elephant (near Choma); Buffalo and Rhino (towards Zambezi, East of Choma and Mazabuka), Kudu (Mazabuka), Red Lechwe and other game, Kafue Flats, etc.

(4) The African Lakes Corporation (at Broken Hill, etc.), will outfit "ulendos," engage lorries, &c. A firm of agents in Abercorn also undertake all motor transport and will meet any tourists at Mpulunga (south of Lake Tanganyika, where the T.R.S. *Liembe* calls), Broken Hill, or elsewhere, and will go in any direction. Some other agents in Broken Hill will also do transport to Abercorn or elsewhere.

The usual hiring rates are, for touring car, 1s. per mile covered, and for 1½-ton lorry about 1s. 2d. per mile covered. If a passenger merely has a seat on a lorry on a journey and does not hire the lorry, he is generally charged 6d. per mile or more, and baggage at 8s. 4d. per 100 pounds for 100 miles or thereabouts. It must be remembered that transport by motor applies mainly to the dry season, as in the rains the roads are often impassable.

NORTHERN RHODESIA (Continued)

CHAPTER TWO

THE GAME OF NORTHERN RHODESIA

By DENIS D. LYELL

ELEPHANT (*Elephas africanus*).—A tall lanky race often reaching 11 feet at the shoulder. Seldom grow tusks over 70 pounds and a 50-pounder is a good one. The record pair from this territory was shot some years ago by Mr. F. H. Melland, and measured 7 feet 9 inches and 7 feet 7 inches and weighed 119 and 110 pounds. The ivory is usually of "soft" quality. Owing to the killing of the larger bulls the females are in a great majority. Like Elephants in other parts of Africa, the herds are given to raiding the native gardens and do much damage.

BLACK RHINOCEROS (*Rhinoceros bicornis*).—Fairly common in wild and hilly country. The best frontal horn I have heard of measured 30½ inches and one much over 20 inches is a good specimen. There are no White Rhinoceros in Northern Rhodesia.

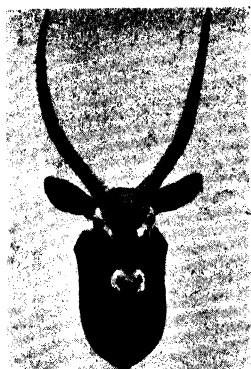
HIPPOPOTAMUS (*Hippopotamus amphibius*).—Plentiful in all the large rivers and lakes, and often raid the native fields. A good length along the curves of the canine teeth is 30 inches and for the straight incisors 18 inches. I once saw a skull with three incisors in it.

BUFFALO (*Synceros caffer*).—Numerous in really wild localities and are sometimes found in large herds. The oldest bulls sometimes consort together apart from the cows. The best horns I have heard of, were 49 inches outside width. Any head measuring 40 inches with a palm of 10 inches is good. The old bulls wear down the points of their horns greatly.

ELAND (*Taurotragus oryx*).—The largest species of Antelope in Africa. Sometimes stands 6 feet at the shoulder. Females often have the longest horns, but they are, of course, thinner. A good male head will be 28 inches on the straight. The best I have heard of was 37 inches.

ROAN ANTELOPE (*Hippotragus equinus*).—Extremely plentiful in most parts. The colour is usually a reddish roan, though the older animals often have a blue tinge. The heads here do not seem as good as in other territories, where it exists. Anything near 28 inches on the curve is good. The meat of the Roan is fair eating.

SABLE ANTELOPE (*Hippotragus niger*).—Smaller in body than the Roan, but grows a much finer head. Like that species, both sexes bear horns. The record for Northern Rhodesia is 52½ inches, and any head from 40 to 42 is better than the average. As in the Roan, naturalists divide the species into several races and the Angolan variety has horns up to 64 inches on the curve, which is immense. This is due, I believe, to phosphates in the feed.



Plates 92—97

Top Left. WATERBUCK.

Top Right. WHITE EARED KOB.

Bottom Centre. RED LECHWE (ABNORMAL SPREAD).

Top Centre. MRS. GRAY'S LECHWE.

Bottom Left. BLACK LECHWE.

Bottom Right. RED LECHWE.

KUDU (*Strepsicerus strepsicerus*).—The most beautiful Antelope in Africa. Only the males bear horns. Numerous in parts of the country, and likes undulating or hilly terrain. A good head would be 57 inches on the curve. In the adjacent territory of Nyasaland the late Major C. H. Stigand shot a bull with a measurement of 63½ inches, which is the best head from Central Africa I have heard of. Nyasaland and Northern Rhodesia are so close to one another that notes on the game of the latter country apply equally to the former. The former country is so adjacent to Northern Rhodesia that comparisons between the trophies obtainable in both countries may be compared as if we were dealing with one territory.

WATERBUCK (Two varieties, the common (*Kobus ellipsiprymnus*), and Crawshay's (*K. d. crawshayi*).—Provide the toughest meat of all the Antelopes, but are nicely shaped buck. The common variety has an elliptical white ring on the rump which extends down the thighs which Crawshay's lacks. A fair head will measure 28 inches on the front curve.

As these Antelopes are very tenacious of life (which applies to all the *Kobus* family), care should be taken to hit them well forward. Never found very far from water, but often go into hilly land when it is near a river or swamp.

LICHTENSTEIN'S HARTEBEEST (*Alcelaphus lichtensteini*).—The only species of Hartebeest existing here. It is difficult to get an outstanding head, as all adult animals seem to grow horns of much the same size. The females also bear horns, and in a bad light it is often difficult to differentiate between the sexes. This applies also to Roan and Sable Antelopes. A pair of male's horns measuring 19 inches on the curve will be a fair trophy.

SASSABY (*Damaliscus lunatus*).—This is a plains-loving animal in Northern Rhodesia, and is mainly found on the flats near Lake Bangweulu, where immense herds can sometimes be seen. Like the Hartebeest it is a tough beast, and south of the Zambezi when hunted on horseback it was supposed to be the most enduring of all the game. Its name long ago was usually spelt Tsessebe. Both sexes carry horns.

NYALA (*Tragelaphus angasi*).—Is the most beautiful variety of the Bushbuck family. It does not exist in Northern Rhodesia so far as I know, although I have heard an unauthenticated report that it has been seen near Lake Mweru. So far no specimen has been preserved from there, so it would be a feat for a sportsman to obtain one, if there is any truth in its existence there. Only the males have horns and a head of 26 inches on the curve is a fair one.

SITUTUNGA (*Limnotragus spekei*).—The most noticeable feature of this animal is its elongated hoofs, a provision of nature to enable it to progress on marshy ground. A head of 31 inches is a good one, and only the males bear horns. As a rule a difficult animal to get a shot at, and the best way of getting one is to watch for them early in the morning or late in the evening, when they may be in the more open spaces amongst the grass and reeds.

RED LECHWE (*Onotragus leche*).—Like the Situtunga is also fond of the wet country, although it is found in more open localities. The skins are a pretty reddish colour. A fair head will be 29 inches on the front curve.

BLACK LECHWE (*Onotragus smithemani*).—Closely allied to the common or Red Lechwe, but instead of being a fulvous colour the skin is a beautiful blackish brown. Grows smaller horns and a good head will be 26 inches on the front curve.

PUKU (*Adenota vardoni*).—Rare in Nyasaland but very plentiful in Northern Rhodesia, especially near the Loangwa River. Only males grow horns. Never found very far from water and inhabits thin bush and low country. This animal is extremely tenacious of life and must be hit well forward. Good horns will be 18 inches on front curve.

BUSHBUCK (*Tragelaphus scriptus*).—The best heads in Africa are found in Nyasaland where they are common. Also plentiful in Northern Rhodesia. They are a very beautiful and sporting Buck to hunt. Only males carry horns and a good head will be 15 inches on front curve.

IMPALA (*Aepyceros melampus*).—Sometimes called Pala or Mpala. Several races and a good head will be 19 inches on front curve. Only males carry horns. Beautiful animals and seldom found far from water, and run in large herds. The meat is good eating.

REEDBUCK (*Redunca arundium*).—Always found near water. Usually seen in pairs. The skin is very thin, and unlike Bushbuck and others does not preserve well, as when dry it is like thin parchment and tears easily. The meat is insipid, but better than most of the Kobus family. Only the males carry horns and a fair head will be 13 inches.

ORIBI (*Ourebia ourebi*).—Fond of open grass country, but when the sun gets hot is found in thin bush. Often seen in pairs. A good head will be 5 inches.

DUIKER (*Cephalophus grimmii*).—There are almost a score of this species distributed throughout Africa. The name is derived from the Dutch word "diver," because on being disturbed this small Buck has a way of diving through cover. However, after bolting a short distance it often stands to look back and thus offers a shot. The meat is good. This sporting little animal is most tenacious of life if badly hit. A good pair of horns will measure 5 inches.

YELLOW-BACKED DUIKER (*C. coxi*).—Scarce in Northern Rhodesia although occasionally found in the country bordering the Congo Free State. Horns of 5 inches will be good.

BLUE DUIKER (*C. monticola*).—I doubt if this species exists in Northern Rhodesia, though it is present on the slopes of Mlanje Mountain in Nyasaland. It is the smallest Antelope in that country, weighing about 9 pounds. Both sexes grow horns, seldom exceeding 2 inches in length.

GIRAFFE (*Giraffa camelopardalis*).—There is only one herd in Northern Rhodesia which is usually found in the country between Petauke and Mzazas on the east side of the Loangwa River. It is strictly preserved and can only be shot by special permission on the £50 Governor's licence.

ZEBRA (*Equus burchelli*).—Few sportsmen will care to shoot many of these pretty animals. They are fairly common in bush country and being preyed on by Lions naturally save the horned game. When spooring Elephants they are often a nuisance as they stampede, making much noise and raising clouds of dust. The skins being thick they are difficult to cure, unless they are thinned down.

LION (*Felis leo*).—Very seldom have good manes in this hot country, and although fine manes are mainly due to cold and regular feeding there



Plates 98—101

NORTHERN RHODESIAN GAME

Top Left. A VERY FINE AND PARTICULARLY WELL SHAPED BUFFALO HEAD, FROM N.W. RHODESIA (49½"). BROAD PALM ALMOST MEETING IN CENTRE, AND WELL CURVED HORNS.

Top Right. BLACK LECHWE.

Bottom Left. SASSABY.

Bottom Right. RED LECHWE, WITH ABNORMALLY FINE SPREAD OF HORNS.

is no doubt that thorny country destroys the hair. A length of 9 feet unstretched is good and few Lions exceed $9\frac{1}{2}$ feet anywhere in Africa. With the advance of civilization Lions are becoming more silent here as they are in Kenya.

LEOPARD (*Felis pardus*).—These animals are not so large as in North Africa and a length of 6 feet unstretched is fair. Leopards being nocturnal are always more plentiful than one suspects. The type which inhabits hilly ground is usually smaller and more spotted than those that live in the plains. Being very shy and cunning unless one plans to hunt them carefully any shot one gets will be due to chance.

CROCODILE.—On off days when living near a river one can get some sport and amusement by stalking these foul animals, and every one that dies will probably save human lives, as Crocodiles kill many natives annually. A big one will be 14 feet.

NATIVE NAMES OF THE ANIMALS IN NORTH RHODESIA

<i>Animal.</i>	<i>Chinyanja.</i>	<i>Chingoni.</i>	<i>Chiwemba.</i>	<i>Chikunda.</i>
Elephant	Injobu	Nkhlovu	Zofu	Imzou
Rhino	Chipembere	Mkhombo	Pembere	Intema
Hippo	Imvuu	Imvu	Mfubu	Imvu
Buffalo	Injati	Inyati	Imboo	Inyati
Eland	Inchefu	Impofu	Insefu	Intuka
Roan	Chilembe	Nturakamwa	Perembe	Ntuwakamwa
Sable	Impala-pala	Nyambuzi	Inkanshiria	Kangombe-Ngombe
Kudu	Ingoma	Lichangaroro	Kaloko	Nzilowa
Waterbuck	Nakodzwe	Chuzu	Chuzwe	Vilimbo
L. Hartebeest	Ingondo	Inkhonze	Inkonshi	Ingondo
Sassaby	—	—	Mtengo-Maroli	—
Gnu	Sindi	Nkonkoni	—	Inyumba
Situtunga	—	—	Insowe	—
Nyala	Boo	—	—	—
(Nyasaland)				
Lechwe	—	—	Inja	—
Puku	Seuli	Seuli	Inseula	—
Bushbuck	Balala	Imbawala	Chisongo	Goho
Reedbuck	Impoyo	Inshlangu	Imfwe	Impoyo
Impala	Inswala	Inswala	Impala	Impala
Oribi	Choe	Chozimbi	Insele	Dambalachepe
Klipspringer	Chinkoma	Ligogogo	Chibushi-Mabwe	Imbalawi
Duiker	Gwapi	Phunzi	Pombo	Nyasa
Sharpe's Steinhorn	Kansenye	Insumpe	Katiri	Kambangu
Lion	Makango	Ingwenyama	Inkalamu	Impondoro
Leopard	Nyalugwe	Ingnewi	Imbwili	Kaingwi
Zebra	Imbizi	Liduwu	Chimbeti	Imbidzi
Wart-hog	Injiri	Incagu	Injiri	Injiri
Bush Pig	Inguruwe	Indudu	Kapole	Inkhumba
Serval	Indudzi	Injosi	Imbale	Inzunza
Hyena	Fisi	Impizi	Chimbwe	Kuzumba
Jackal	Inkhandwe	Likanga	Mumbwe	Inkhandwe
Wild Dog	Imbulu	Indacha	—	Imbinzi
Crocodile	Ngona	Ngwenya	—	Nyakoko

In former lists of native names for the various game I did not give the phonetic spelling of the words, but do so in this list as a help to the beginner. Many words beginning with the letters "M" and "N" are pronounced with the prefix "I," but in a few cases this is not so. For instance, the word Mpala is pronounced Impala; but Nyalugwe, the Chinyanja word for Leopard, has no "I" prefix. The Chinyanja tribe call the Lion Makango, and the word for the Guinea-fowl is Makanga. This often leads to confusion, even among the more experienced. I have heard of several instances when on hearing a native say "Makanga" a man has sprinted through thick bush, with his nerves at full tension, expecting a shot at a Lion, when there was nothing there except a flock of Guinea-fowl! It is difficult to give the phonetic pronunciation correctly for in a few words the natives may use a click, especially in the first syllable of a word, so the only way a man can learn the language is to hear it spoken often.



RHODESIAN GAME

Top Left. SITUNGA IN N.E. RHODESIA. NOTE THE SWAMPY COUNTRY IN WHICH THEY LIVE.
Top Right. KING CHEETAH FROM S. RHODESIA. A VERY RARE VARIETY BUT LATELY REPORTED. (MODELLED IN ROWLAND WARD'S STUDIOS.)
Bottom Left. CAPE BUFFALO FROM N. RHODESIA.
Bottom Right. ELAND (ZAMBEZI RACE) FROM S. RHODESIA.

NORTHERN RHODESIA (Continued)

CHAPTER THREE

NOTES ON "ACINONYX REX" (COOPER'S CHEETAH)

By MAJOR A. L. COOPER, D.S.O.

THAT this animal was known of for some time past is borne out by the fact that, twenty years ago, mention used to be made round camp fires by natives of a beast that was neither Lion, Leopard, nor Cheetah, and, though considered by a number of people to be as mythical as the huge horned water serpent that is supposed to exist in some equatorial swamp, I believe was referred to as the "Mazoe Leopard." It was apparently commoner in those days than it is now.

That such a remarkable animal can exist and yet not be known to science is exemplified in the case of the Okapi (*Okapi johnstoni*), which was eaten by Belgian officials in the Congo fifty years before its name was added to those of the known mammals. The first intimation of its existence was given by Mr. Doggett, a member of Sir Harry Johnston's party, who noticed a native wearing a peculiarly marked piece of skin.

I was first shown the skin, now in possession of the Salisbury Museum, by Sir Clarkson Tredgold, who informed me that it had been presented to the Museum by Mr. Donald Fraser (late I.C.S.), who had purchased it from natives, who stated that they had killed it in the Macheke district. There were four or five in the troop but they only succeeded in killing one. Although I am fairly conversant with the fauna of South Africa, this skin was absolutely unlike anything I knew. The build, as far as one could judge from the skin, was similar to that of a Leopard, being heavier and more stockily built than a Cheetah, yet there were the distinct, non-retractile claws of this animal. Furthermore, the long fur on the belly, the orange background, the curiously raised or embossed stripes, were unlike any known animal. The suggestion was first put forward that it was a hybrid between a Leopard and a Cheetah, but this struck me not only as being an impossibility, but also failed to supply an explanation. I then wrote to Mr. Oldfield Thomas, sending him photographs of the skin and asking for an opinion. He passed my letter on to Mr. Pocock, of the British Museum, who kindly answered my letter in an article in the *Field*, in which he put forward the suggestion that the skin was that of an aberrant Leopard; he also published reproductions of various aberrant specimens.

In the meantime, I had been making inquiries everywhere and received great assistance from Mr. H. M. G. Jackson, Assistant Chief Native Commissioner, who besides having known this country for many years, is a keen naturalist and observer. It was he who informed me that he had seen a similar skin at the American Mission at Utambara. It was also an old

native police sergeant of his, who, when shown the skin, said he knew the animal, told us its native name, and informed us of its habits, namely, that it was extremely shy, never attacked domestic animals except possibly a young Kid, and, when chased by dogs, never took to a tree as a Cheetah occasionally does.

Thanks to the kindness of Sir Herbert Taylor, Chief Native Commissioner, all Native Commissioners in the outside districts were circularised in an attempt to obtain further information, with the result that it was found that Mr. Watters, Native Commissioner at Bikita, possessed two such skins, photographs of which he sent to Mr. Jackson. These were presumably obtained in his district. Apart from these two, I found Mr. Lacey of Salisbury also had a specimen, which he obtained from natives and which was stripped from an animal killed some twenty miles south of Salisbury. This skin he kindly allowed me to photograph.

On comparing the various photographs the regularity of the markings was most noticeable. Furthermore, it confirmed my original opinion that the skin in possession of the Salisbury Museum was that of an immature or undersized animal, probably the former. When I obtained this evidence I again wrote to Mr. Pocock placing the facts before him, and, with the kind permission of the other members of the Queen Victoria Memorial Museum, I sent him the skin. I put forward the fact in view of the evidence that I had collected, that, however improbable it may have seemed, a new species of *Felidæ* had been discovered.

In the *Field* Mr. Pocock replied in a lengthy and most interesting article, wherein he stated that the new Cheetah had been named *Acinonyx rex*, to emphasize the magnificence of its coat. This is the history of its discovery, if it can be described as such.

D E S C R I P T I O N

In spite of every effort, I have, up to the present, been unable to obtain a skull, but it is only a matter of time before one is secured. With regard to the skins, the two I measured are, respectively, 6 feet 9 inches and 7 feet 3 inches, but, judging by the photograph, one of the skins in possession of Mr. Watters is considerably larger. The markings are irregular, longitudinal stripes about 1 inch in width on either side of the back and continued more than half-way down the tail; on the flanks and the quarters these stripes became blotches. The peculiarity of these markings is that they stand out from the background, which is considerably darker than that of the common Cheetah, as if they were embossed; in reality, the black hairs of the marking are at greater angles to the skin than the yellow ones of the background. This adds greatly to its striking appearance. The feet and claws are typically those of the Cheetah, with the short, straight claws unguarded by a sheath, the dew claw large and hooked. It would not be out of place here to remark that, in Cheetah cubs, the claws appear to be almost as retractile as those of a Leopard cub, but as the animal grows older, the sheaths of the claws appear to harden. What probably occurs is that sheaths do not grow in proportion to claws. The vibrissæ are shorter and fewer than those of a Leopard, and the hair between the eye and ear points forward. The mane is very marked, the hairs composing it being $2\frac{1}{2}$ inches long, and the fur on the belly is considerably longer than that on either Leopard or Cheetah.

NORTHERN RHODESIA (Continued)

CHAPTER FOUR

RED & BLACK LECHWE

(Extracts from a Diary)

By CAPTAIN G. BLAINE, M.C.

IN early September I left Livingstone by train for Mazabuka, 300 miles north, where I hired a car to take me to the Lochinvar ranch, through which flows a tributary of the Kafue River, running north. This ranch is full of Red Lechwe. It has an area of about 100,000 acres, capable of supporting 10,000 head of cattle and runs with a frontage of about 12 miles on the Kafue River and a depth inland of roughly 18 miles.

I had previously sent on nine carriers' loads of my outfit to Chungu, a small homestead on the edge of and overlooking a vast area of treeless flats, very green in streaks and patches and still partly under water. A low ridge extends for miles, marking the difference in level between the swamp area and the drier flats. In the foreground of the swamp area were dark surging masses, splashed and speckled with white flakes. These were countless Spur-winged Geese in huge flocks, and large groups of Pelicans, Black Storks and Egrets. Periodically they rose into the air like a heavy cloud of smoke, then settled again in long surging waves. Among these were herds of Red Lechwe, the more numerous, perhaps a hundred strong. They are sometimes seen in thousands, and, one is told, formerly herds amounted to some five thousand head, but they have been slaughtered in great drives by the natives wholesale, and shot up by Europeans. They are now chased in motor cars, which is considered the only way of getting them.

At first I found the Lechwe hopeless to approach owing to water obstacles and the birds, which rose in masses, making a roaring noise with their wings and completely obscuring the view, while this warning kept the Lechwe constantly on the run.

At Chungu there is one big tree, a landmark for as far as anyone is likely to walk on these strangely level flats. One is bounded always by a horizon which appears to be about a mile in diameter, no more.

I avoided the swamps, as the mosquitoes there attack you in the daylight. They are very bad at night too. Luckily there is a breeze blowing "off the land" most of the time.

I shot a good Lechwe after some tedious manœuvring. He was the best of a small herd, with horns of 32 inches and a big spread. They are very graceful animals and have long necks. They trot in an ungainly fashion, with their necks stretched horizontally and their heads low, looking all the time as if they were going to fall on to their noses, but when extended at full gallop their action is free and sweeping. They are

always on the move except when the sun is hot, when most or half the herd lie down. But some always remain grazing.

I saw many more bucks than does, some herds consisting almost entirely of bucks.

I now thought of using a donkey as a stalking horse, with some success. For as soon as he saw the Lechwe he was all for going towards them. By keeping a tight hold of his head I kept him sideways, always edging towards the quarry. I got within 150 yards. It was not easy to spot a good head but I finally managed to bag a fair one. The next day I shot a big Lechwe, out of a herd of two hundred. The donkey ruse was most successful.

It was a forbidding country. A long ridge stretched south-east and north-west which marked the boundary line between the swamp area and the dry plains, at a level of a few feet above it. The swamp is a huge expanse of olive green fading into the horizon in the north. The plain is yellow with black and green patches, showing where the grass has been burnt. The ant-hills gradually peter out towards the plains. Dark lines raised slightly over the low, level horizon denote the massed herds of game, Lechwe and Zebras. In the swamps are lines of black and dazzling white, the former Spur-winged Geese or Black Storks, the latter great battalions of Pelicans. Lechwe are often among them, showing up a dingy red and making rather bigger blotches in the green or yellow expanse. Mirages are of frequent occurrence, when the sun is well up, and then the game appears as tall, vertical, shimmering smudges against a dazzling, quivering horizon. Here and there is the smoke of grass fires, generally appearing white, and black dust devils, the charred powder of burnt grass, which whirl up on the plain. Small parties of natives can be seen crossing this vast plain often with a few cattle and always accompanied by a few lanky dogs.

From this place I returned to the railway and trained to Ndola via Broken Hill. Here I refitted for a trip through Lake Bangweolo. Ndola has several good stores and has the makings of a more attractive place than most I had seen in those parts.

I now motored on with my baggage north-east to Kapalala on the Luapula River. Here I packed myself and my kit in an iron canoe, which had been arranged for me by local people. Hereabouts the Luapala runs in long, straight reaches. It is a fine wide river with a deep, open channel. The banks are firm and bordered by a narrow fringe of reeds. We passed two small parties of Hippo in the morning, but very few birds. In the afternoon I saw a few Puku and shot a Reedbuck, while Lions are reported so plentiful that the boys objected to sleeping on the mainland. Thus we continued a week in the canoe down the Luapula, camping on shore by night and with a halt at midday. We averaged perhaps eight to ten hours per day. We saw Eland, Roan and also Sassaby besides other smaller game. On the tenth day we had begun to reach the huge swamps which border the southern part of Lake Bangweolo. From Mbo to Njeta is one of the most interesting parts of the journey. The water-way entered a swampy plain of short grass. There were large herds of Lechwe scattered about this plain. I went after one lot but found we had to wade through water to get to them. I shot one, but had an unpleasant wade through varying depths

of water to get to him. This was a Black Lechwe. We were accompanied on our way by several canoes and our own iron barge, in the expectation of meat. I shot another Lechwe and gave it to these people. They had found a third Lechwe near by, killed by a Lion during the night. There certainly were a lot of Lions at this place, Mbo. They were roaring on both sides of the camp at about 4 a.m. The Lions of the Bangweolo swamps are said to be small and spotted, but I have seen no skins to confirm this.

All along the waterway, which was narrow and winding, and so shallow in places that the boys got out and waded, the iron canoe was punted, pushed and pulled along. From these vast, inundated plains we entered a narrow channel between great beds of papyrus, and this part of the way was very tiresome. The boat was too long for many of the turns and kept on sticking at the bends, and progress was very slow. I suspect that these places are the haunts of the Situtunga. All the afternoon was spent going through this interminable papyrus swamp. At last, at about four o'clock, we emerged into a lagoon, into and out of which a labyrinth of channels led. Opposite, sticking out of the reed beds, were two big trees, a garden of bananas, and the thatched roofs of a store and a small village. This is Njeta.

Next day, Njeta to Mwewa Numbwa, ten hours. This is the worst day's journey we did. Leaving Njeta island the passage is across an open expanse of water. Soon a narrow channel is entered, which is merely a mud canal a few feet deep. Through this the boat must be punted, pulled and pushed at the rate of about one mile per hour. Towards midday we emerged into another lagoon, and I had lunch on a plot of ground a few square yards in extent. This is a most desolate region, a vast expanse of reeds, with here and there patches of papyrus and fern. Towards sunset we came into a wide lagoon and reached the village of Mwewa Numbwa.

Next day a flotilla of dug-outs took me out through the swamps to one of the partially inundated flat plains on which was an enormous herd of Black Lechwe, nearly all males. There must have been at least eight hundred head in the herd. I was seated in a small dug-out, which was very uncomfortable. The local men are wonderfully adept at poling their canoes through these swamps.

I shot five Lechwe to please these people; their village is a crowded one and the meat would not go very far among them.

The majority of the Lechwe do not show much black, none are wholly black. They are a rich foxy red, with black on the sides of the face, neck, shoulders and body. Next day I went on a Situtunga hunt, accompanied by the canoe flotilla. We repaired to a patch of thick papyrus in the swamps and arranged a drive. But although two young Situtunga were speared and a good male went away unseen by me, I actually had no chance for a shot.

Two days later we were across the lake and found ourselves in the mouth of its Chambezi River on its eastern side.

NORTHERN RHODESIA (Continued)

CHAPTER FIVE

SITUTUNGA

(Extracts from a Diary)

By CAPTAIN G. BLAINE, M.C.

THE country round Kampanda is typical of much of North-east Rhodesia, including the high Tanganyika plateau, and extending to the Luapula River, which forms the boundary between North-east Rhodesia and the Katanga province of the Congo.

It consists of one endless expanse of forest, intersected by small plains or "dambos," generally marking the courses of the rivers or streams along the larger valleys and all the flat, low-lying ground.

Most of these dambos are converted into swamps during the rains and are then covered with thick, coarse grass and reeds, presenting a smooth, unbroken surface of brilliant green.

In the dry season (May to September) after the grass fires, they appear black and charred through a dancing heat haze under a sky of brass.

It is then that the larger Antelopes—Eland, Roan, and Hartebeest—frequent the dambos, feeding in the early morning on scanty shoots of young grass, and often standing about in herds or lying about in the open during the heat of the day. As soon as the rains start, they leave the plains, and splitting up into small parties, roam about on the high bushveldt.

The forest is monotonous and unvarying. On the plateau are no fine trees, only stunted bush and no shade.

A great feature of this country are the huge ant-hills, sometimes twenty feet high, scattered throughout the forest and on the dambos. Some are covered with grass and others bare, with great pinnacles of red, yellow or grey earth.

The river system of this country is splendidly developed. The source of the Congo is actually on the Tanganyika plateau. It starts as the Chambezi, south of Abercorn. Beyond the plateau the Chambezi is joined by its tributary, the Chozi, which drains the centre of the plateau and then flows south-west. It is joined by several other rivers before it reaches a swamp at the southern end of Lake Bangweolo. Finally it becomes the Congo River.

On most of the rivers are big swamps, generally near the source, the river flowing through the swamp in a deep channel.

On the Loongo, a tributary of the Luapula, not far from Kampanda, there is an immense swamp. This is the home of the Situtunga. The Lechwe keep to the wetter parts of the plains, where there is plenty of water. The Puku prefer the drier parts, keeping more to the edge of

the plains among the ant-hills and thin bush, but are always near the river.

One morning I crossed the river and followed the southern bank of the Loongo, keeping along the edge of the swamp on the look-out for Situtunga. At one place I saw some Situtunga—two bucks and a female—feeding quietly in the middle of the swamp about half a mile away, but could not get to them, as the water was too deep. A mile or so farther on, as I was passing a stretch of short reeds, which came up almost to the path, I saw a lovely pair of Situtunga horns sticking up in the reeds twenty yards in front of me. I managed to creep up within ten yards before he spotted me, or, at least, until he moved, and then shot him as he rushed off. He was a very old buck with horns of thirty inches. A Lechwe jumped up and made off from close by. Farther on was a huge herd of Lechwe and some Puku.

I quote this as an example of finding and shooting Situtunga in a very easy place and not hidden in deep swamps. On many occasions they were quite unapproachable owing to deep swamps. In some localities they could be spotted by making use of ant-hills as spying places.

As with many species of the more uncommon game, the Situtunga can hardly be called a rare beast, if you reach his favourite and rather isolated habitats. On many occasions I saw several Situtunga in the course of a morning, often inaccessible or demanding long, or, if close, standing shots. When wounded or pursued they generally took cover in deep, swampy reed beds and were most difficult to pick up again, as they wholly immerse their bodies in the water, with only the nose above the surface.

PART TWELVE

SOUTH AFRICA

CHAPTER ONE

GENERAL

By MAJOR H. C. MAYDON

SOUTH AFRICA, including all south of the Zambezi and the Limpopo Rivers, but excluding South-west Africa, is, from the shikari's point of view, one of the saddest parts of Africa.

Read the books of Cornwallis Harris, Finaughty, Gordon Cumming, and others of that ilk, and go and see what now is left of the game. Seventy years have wrought this havoc. Selous, who links us with these old-time Nimrods, saw the last of the game, and was himself forced further north into Rhodesia.

South Africa is the best and most irrefutable proof that big game and civilization cannot exist together. Yet South Africa, with its less than a million whites to 500,000 square miles of territory, is scarcely over inhabited.

It is the wire fences and constant raiding parties of shooters which have driven the game away; and with many species of big game to be driven away from their habitat means to drive to extinction. The Bontebok is practically extinct, and the Blesbok will soon follow. Vaal Rhebok are not known north of the Zambezi, and are exceedingly rare south of it.

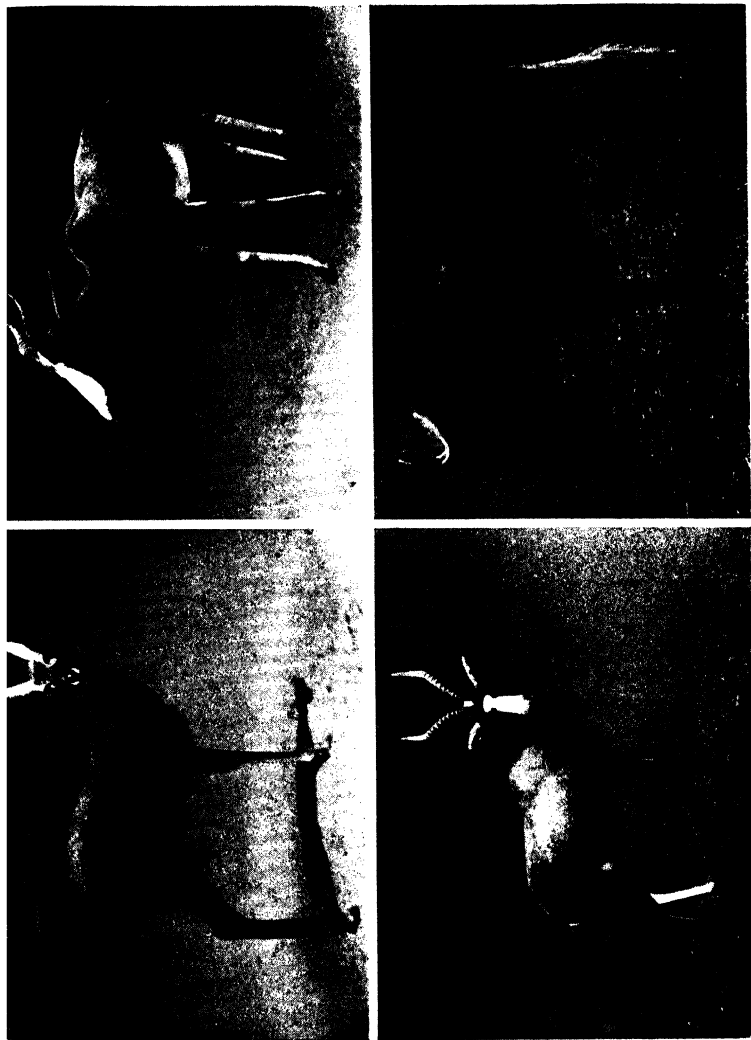
Gemsbuck, Eland, and Kudu can still be found in the north-west in the Kalahari Desert and Bechuanaland, with small and scattered herds of Springbuck.

There is game in Zululand, the Bushveldt, Lydenberg, and the North-east Game Reserve, near the Portuguese border, but in none of these districts is it the real thing. When I was soldiering there, in a mess full of keen shikaris, none of us could find a hunting-ground south of the Zambezi to tempt us to spend our long leave.

There are localities still left to spend a ten-days jaunt—there are lesser prizes of the smaller Antelopes, which do not exist elsewhere, but these will tempt only the specialist to fill a gap in his collection, and the resident or the traveller who seizes an opportunity.

However, there yet remain two good hunts at least, each with a fine trophy as quarry, in still unspoilt surroundings and with the promise of good hunting after a now rare beast. These are Gemsbuck in the Kalahari Desert, and Nyala in Zululand.

A description in detail of each of these two hunts follows. Let it be



Plates 106—109

SOUTH AFRICAN GAME

Top Left. VAAL RHEBOK ♂. MALES CARRY UPRIGHT, STRAIGHT AND SLENDER HORNS UP TO 11 INCHES LONG. FOUND IN THE OPEN HILLY DISTRICTS OF S. AFRICA.

Top Right. BONTBOK, FORMERLY IN THOUSANDS IN S.A. NOW REDUCED TO A SINGLE HERD, PRESERVED IN CAPE COLONY.

Bottom Left. BLESBOK, CLOSELY ALLIED TO BONTBOK. NOW PRESERVED ON FARMS.

Bottom Right. WHITE TAILED GNU, OR BLACK WILDEBEEST. ALMOST EXTINCT IN S. AFRICA, SAVE ON FARMS.

understood that in the case of Zululand the writer claims no great experience of that particular country. Local experts may laugh to scorn the business he made of it. But the point is that the man who wishes to make a collection and to hunt everywhere can be an expert of none. He must buy his experience with hard knocks and many failures, and maybe it is the history of these mishaps which will serve as the best guide for the future hunter.

In any case he found his quarry.

One other point: the Kalahari is doubtless not the best country in which to hunt Gemsbuck. South-west Africa and the coastal belt of South Angola—which are described elsewhere—are better. But South Africa is more easily accessible and for its old game history deserves to keep a "star turn."

Nyala may be more common in Portuguese East Africa, but I believe the climate is more unhealthy and the preservation is certainly far less well carried out. Their only other habitat is in Nyasaland.

But as the shooting season is the same for both, from May to September, both the Kalahari and Zululand shoots could be carried out on the same expedition. A month to six weeks should be sufficient for either hunt.

In this way the same Kaffir servants, camp equipment, etc., could be utilized for both shoots. Durban would be your port and base for Zululand, and Kimberley or Kurman your base for the Kalahari.

As to the other game to be found in South Africa, south of the Zambezi River, and excluding South-West Africa:

<i>Kalahari and Bechuanaland.</i>	<i>Zululand.</i>	<i>On Farms.</i>	<i>Bushveldt.</i>
Gemsbuck.	Nyala.	Blesbok.	Eland.
Cape Hartebeest.	Waterbuck.	Bushbuck.	Sable.
Kudu.	Reedbuck.	Springbuck.	Kudu.
Eland.	White Rhino.	Black Wildebeest.	Lion.
Steinbuck.	Black Rhino.	Blue Wildebeest.	Several of the
Springbuck.	Buffalo.		smaller species.
	Rhebok—Vaal and		
	Rooi.		
	Bushbuck.		
	Blue Wildebeest.		
	Kudu.		

Leopard, Duikers, and Oribi are common to all districts.

SOUTH AFRICA (Continued)

CHAPTER TWO

GEMSBUCK

By COLONEL STEVENSON HAMILTON
Sometime Game Warden

THE Gemsbuck is, of course, the South African Oryx, and is an altogether larger and heavier animal than any of the northern types. The long, straight horns of both sexes form very handsome trophies, while those of the bulls are considerably thicker than those of the other sex, the latter are longer and, on the whole, handsomer.

Gemsbuck at the present time are distributed all over the more arid districts of South-west Africa. Formerly they extended as far south as the Orange River, but have been nearly shot out, except in the very northernmost part of the Cape Province, where it adjoins Bechuanaland and South-west Africa. The species is still abundant in the Kalahari Desert where, in default of water, it uses the juice of the t'sama wild melon, which is diffusely spread over that otherwise waterless zone. Consequently, until some years ago, when the motor car arrived in this remote region, the Gemsbuck had a natural reserve in which its only enemies were the wandering bushmen and other nomads, and an occasional Lion. Now, however, all is changed, and cars can penetrate right into its remotest fastnesses. For the country being flat, roads are more a luxury than a necessity to a light automobile. The Gemsbuck is, therefore, rapidly decreasing, and though still existing in large numbers, it is not to be expected that outside the sanctuaries which are eventually to be established in the Union of South Africa and South-west Africa, the species will survive very long.

My own experience dates from the ante-car period. But anyone out for a sporting shoot, and not just for quick returns with the minimum of exertion, may still pursue the same lines, with the difference that the preliminaries would be performed by car in one day, instead of by ox-wagon in a week.

I chose the Molopo River, first because it was the best place within reasonable distance of the railway, and secondly because my old friend, the late Colonel Panzera, at that time Administrator of British Bechuanaland, had arranged to make things easy for me, and to be my host on both outward and homeward journeys.

Mafeking, where the Administrator of Bechuanaland has his official residence, possesses the peculiarity of not being in that territory at all. It lies some miles inside the border of the Cape Province, and so presents the anomaly of a little self-contained government, residing, so to say, in a foreign country. Mafeking came into prominence during the Boer War, and is but little more than a village in the midst of a huge and perfectly

flat plain, with the main line from the Cape to the Zambezi running through it.

From Mafeking I went to Pitsani in Bechuanaland, which is the best jumping-off place for the Molopo.

I had selected April as the best month for the shoot, since it is soon enough after the rains to allow for a good many of the pools being still full, while one is not so likely to be held up by heavy downpours as might be the case a month or two earlier.

The Molopo, which runs east and west, and finally loses itself in South-west Africa, forms the boundary between the Bechuanaland Protectorate and the Cape Province. It is a wide stream bed, showing all the indications of having been, at some not very remote period, a large river, carrying, in the rainy season, a heavy volume of flood water. Now it is merely furnished at the end of the summer with occasional pools, which, in the winter season, nearly all dry up. A few Boer squatters reside here and there on the south bank, having come up from the south after the game, but they can hardly be regarded as permanent residents. The usual Bakalahari nomads are known as "Vaalpens," or Grey-Bellies, because they are supposed, having no garments to speak of, to be obliged to sleep so close to the fire on cold nights as to scorch that region of their bodies. They wander about the country, sleeping in miserable temporary shacks of grass and sticks, and live mainly on the game, and on roots which they dig up. They are light copper in colour, and certainly contain a strong strain of Bushman blood.

Perhaps extracts from my journal kept at the time will give the best description of this short expedition, and of the country and conditions which have not, as yet, altered greatly.

11th April.—At Pitsani.—The local chief and others came over in forenoon to bargain about transport to take me down the Molopo. I wanted to hire an ox-wagon and span with driver and leader, for which some of them wanted to charge 1s. 6d. per ox per day! The chief undertook to supply wagon and oxen for 12s. per day, and driver and leader for another 3s. 6d., which was what someone paid last year, but is, nevertheless, exorbitant. Corporal Brierly, of the Bechuanaland Police, did the bargaining. Pegler, the local storekeeper, said that as it was a full tent wagon, perhaps I had better agree; but just as I was about to do so, Frank, the boy who transported myself and belongings from Mafeking, came forward and offered to take me in his half-tent wagon, sixteen oxen, driver and leader, for 5s. per day all told. Needless to say, I closed with this at once, and started at noon. Borrowed Corporal Brierly's mule, and was accompanied as orderly by a B.P. native constable on another mule, with a red pugaree round his hat, and Lee-Metford rifle, all complete.

Trekking till 3.15, then halted till six, and went on again till 9.30 p.m.—No water.

12th.—Started at dawn and I remained in bed in the wagon. After a halt for breakfast reached Sidili Molomo at 1 p.m., and Mabula at 5.30, about 25 miles in the day, which is pretty good for these rather undersized oxen.

13th.—Got to Lotlokana at night.

14th.—Rained all last night and more or less all day. Passed the Boer settlement on south bank of Molopo—about six mud shanties, and perhaps six acres of mealies growing. All their horses have died of horse-sickness,

and they cannot get any others, so their activities after the game are now limited. Outspanned in pouring rain, from 4.5 p.m., then on for an hour. Travelling inside the wagon; the route being through soft sand, there is no jolting.

15th.—Rain stopped, but everything sopping. We are now in the game country, and the boys are anxious to halt, so that I may shoot meat for them. They keep talking in my hearing about "Kudu," and Frank asked for the loan of my rifle to lend to a Vaalpens to shoot a Duiker! They find it hard to realize that I am after Gemsbuck and nothing else.

16th.—Halted to-day, and went out on the mule after breakfast with two Vaalpens, and scoured the country for five hours, seeing a few fresh tracks of Gemsbuck and Kudu, but nothing in the flesh. There were a few Duiker and Steinbuck about, however, and I shot one of the latter for meat on the way home. Heavy thunderstorm came on just after we had got back to camp.

17th.—Broke up camp. This place is too near the Dutchmen for there to be much game. In fact I heard their dogs barking yesterday not far away. Trekked along the river 8.30-1.30. Halt for two hours and then on till six. Am now 20 miles from the Dutchmen. Saw no game except Duiker, but plenty of spoor of Gemsbuck, Kudu, and Wildebeest.

Friday 18th.—Went on five miles to place said to be forty miles north of the police camp at Marokweng, and beyond the farthest point to which the Boers frequent, in fact my guide and tracker, "Pony," says that only one white man came as far as this last year, and that parties don't get below my camp of two days ago. The only game-killers here are the Bakalahari, or Vaalpens, who are found here and there in the bush, and there are none below this. But as "Pony" himself has never been further, it is to him the end of the world. "Pony," I may say, is himself a Vaalpens, with more than a dash of pure Bushman blood. He is about five feet high, strongly built, in colour—so far as one can see for dirt—a very light copper colour, and his sole garments are a tiny and very filthy bit of skin worn as a waist cloth and an old military cloth forage cap, of antiquated pattern. He is well-known locally as a hunter, speaks a few words of English, and came in to me a couple of days ago in response to a message sent through the police orderly, who explained that I was the man who had been after Hartebeest last year further up the Molopo. Walked out a mile from camp to a place where there is a small salt lick. The Bakalahari have erected a thorn fence round it with game-pits in the several openings, all cunningly concealed by grass. There are sharp stakes in the bottom of each pit, and some of the latter seem to be very old. However, from the tracks, and from what "Pony" says, he thinks only three or four per year get caught. In afternoon went on four miles to a big water pool, and made camp at a spot ninety-six miles below Pitsani.

19th.—A storm last night at 1.30 a.m., but I was warned and was inside the wagon when it came. Flies very bad by night, as by day. My riding mule escaped when grazing yesterday evening, and was absent until 10 p.m., when the boys, who had followed the spoor, found it three or four miles on the back track.

A lovely morning after the storm. Started with "Pony," Sidjo (another Vaalpens), and "Fourpence" (the policeman), and two mules, of which the last-named rode one, and myself the other. Went for about two and

a half hours north-north-east without seeing anything; then struck a solitary Gemsbuck spoor, and followed it due west over open plain, and afterwards through low scrub for an hour. The country then became closer, with larger trees and many thickets. I dismounted, took the rifle, and told "Fourpence" to follow well in rear with the mules. The spoor now turned down wind, and I had begun to feel rather hopeless, when suddenly "Pony" stood for a moment at gaze. Before he could make a sign a big Gemsbuck bull dashed full tilt from a thicket some seventy yards in front, and went diagonally away from us. Lying down in the midst of the thicket, he had caught our wind. I had just time for a snap shot ere he disappeared in the bush. Sidjo called out "hit," and I had the intuitive feeling that he had not gone far, though none of us could see anything for the bush. We raced forward as hard as we could, Sidjo falling down in front of me in his excitement. Rounding a corner of bush, the Gemsbuck was seen, on his legs and making off, but only forty yards away. I gave him another, which did not stop him, though we found afterwards that the bullet penetrated at the left buttock and raked him through to the shoulder. A third shot caught him fairly in the back of the head, and rolled him over, stone dead. A big bull, though his horns were nothing out of the way, being a bit worn down. He measured 7 feet 8 inches over all, of which 1 foot 3 inches was the long tufted tail, and the girth behind the shoulder was 5 feet 1 inch. The first bullet—a lucky one—had caught him high up in the rump, and had jarred but not broken the backbone. It had knocked him over, and he had dragged himself for ten yards before getting on his legs again, thus giving me time to get up for a view.

Luck was in, for this was the only fresh spoor we saw all day, and it was a wonder we got up as close as we did with the wind wrong, for these old solitary Gemsbuck bulls have the reputation of being very cunning and wary. Also the shot was, on the whole, a very lucky one, as he was going for all he was worth through trees at eighty-four yards when I fired. Sent "Pony" back for the oxen and sledge, and stayed to see the head skinned. After this had been done I rolled it up and, taking it with me, started for home with "Fourpence," leaving Sidjo behind to skin the body.

We struck the river in four and a half miles, but nearly five below camp, and followed the stream bed up through very open country. A mile from camp we came on a deserted mud and thatch house, with a derelict well twenty-five feet deep, with no water in it; the residence of a Dutchman up to about nine years ago. Inspected the place, which is called Padden, and found numerous scrawls and rough drawings on the walls made by various Cape Police patrols which came up sometimes as far as this point. Arrived camp at five and sledge got in an hour or so later.

Sunday 20th.—Brilliant day after a chilly early morning. Out at 7.15 with the usual outfit. First of all proceeded to the game pits at the salt-lick. Some Kudu had evidently been taking advantage of the neglected holes in the fence. Saw where a Vaalpens had been following on the spoor of a single Kudu. "Pony" says that one of these men will follow on like that for days right into the desert, sleeping on the spoor, until he finds the buck asleep, when he creeps close up and throws his spear.

One must go quite ten miles into the Kalahari from the Molopo before there is likelihood of seeing Gemsbuck in any numbers. There seem to be plenty about, but distinctly wary.

Went north-east, and in the middle of an open plain saw one bull with three cows. Managed to stalk up behind some bushes to about three hundred yards, but when I sat down, found the long grass hid them, and there was no friendly tree trunk to stand behind. Mirage also was so bad that I could not make out what heads they carried. While I was considering what to do, the wind, which was blowing all ways, suddenly gave them a whiff of us—(I am sure they could wind "Pony" irrespective of its direction!)—and they went off full tilt at once. Subsequently followed the spoor of a lone bull, but he had been gone a long time, and showed no intention of halting, so gave it up at 3.30 p.m., and back to camp at five. I want, if possible, to get a good cow and one more good bull, as the horns of the one I shot yesterday are rather short, though thick.

21st.—Cloudless day. Started at 7 a.m., and went north for six miles before seeing any spoor, and then finding that of a lone bull, followed it for a mile into some bush. Here a Steinbuck spotted us, and dashed apparently right into the Gemsbuck, which at once made off, without our catching a glimpse of it, though we were quite close. All these clumps of bush are absolutely alive with Duiker and Steinbuck, and as the solitary Gemsbuck bulls usually lie up in such places in the heat of the day, it adds to the difficulties of approach to have so many of these small Buck about.

Continued on the spoor and after another mile it led into more bush, when the same thing happened again. This time, on emerging on the far side, saw him going hard about three hundred yards away, and did not risk a shot in case he might perhaps stand again, but though we followed on for six miles, he did not do so. These Vaalpens are wonderful trackers; in this case they ran so fast on the tracks that my mule had to trot to keep up with them, and they never once paused or hesitated. Presently saw a herd of eight females—and immatures—among which there seemed to be one very good cow. Owing to open nature of country I could not get nearer than four hundred yards, and my first shot went high, but not having seen me, they stampeded right in my direction, and pulled up quite close, when I rolled over the animal I wanted. She proved to be a very fair cow with long, thin horns. I still have a week yet, and shall now devote it to trying to get a really good bull, and disregard everything else.

It was twelve miles back to camp, and we had all had quite enough. To-day, I saw for the first time the Bushman dodge of sucking up water through a reed. The sand is so loose that water disappears before one when one digs, but if there has been rain fairly recently the Vaalpens push a long hollow reed, very carefully, several feet down, into the sand, suck up the water through it, and then spit it out into a gourd, or other vessel! It can then be drunk at leisure, or used to make tea! Luckily, I was not so hard pushed as to require this aid, "Fourpence" and I both having water in our bottles, but "Pony" and Sidjo both made full use of it.

22nd.—Hot. Out at 7.15. Went north-east, and got into country strange to "Pony." Nearly treeless plain. Few signs of game. Followed a lone bull spoor to east-south-east for an hour. It was quite fresh, but the wind wrong, and after a time we saw that he must have winded us, for he had made off at a gallop. Camp at 3.30.

There is no doubt the Gemsbuck are all a long way out from the river in the daytime, and it means from two to three hours each morning before one can even arrive on the ground, and it means a long, slow journey back

at night. The meat shot yesterday was wasted so far as we were concerned, because it was killed too far away from camp to get it in.

23rd.—Started early, leaving orders for the wagon to trek to a place six miles out, and to carry water for one night. After a three-hours blank search saw three Gemsbuck a long way off, one of which was a very big bull, but they saw us as soon as we did them, and were off. Then saw a solitary Vaalpens crossing the plain. Sent for him, and he proved to be a very tall, naked savage, who said he lived in the bush in these parts, and he took us to a good-sized water pan, near by which was a grass shelter—not his own home, he was careful to tell us, but that of another aboriginal. Lots of Gemsbuck spoor by the water, and a big, open plain, covered with brushwood about two feet high all round. Rested for an hour to graze and water the mules. About 2.15 left and went back to the wagon rendezvous, about eight miles. On way back saw two Gemsbuck coming our way. We concealed ourselves, and they passed about 250 yards away. One was a small bull, and the other a bit larger, but not as good as the one I have already; and anyhow, I was not very keen to shoot as we were so far from the wagon, and it was getting late. Saw Hartebeest on two occasions also.

24th.—Hot. Air dry; one does not feel the sun, but it cracks the lips. Trekged twelve miles out into the Kalahari to a water pan which our friend of yesterday had described to us. Saw no signs of Gemsbuck, only Ostriches and the usual small Buck. Camped out of sight of the water, and in evening climbed a tree, with the field-glasses, but could see no sign of life in the vast perimeter. The Kalahari is as flat as a pancake, and an elevation of ten feet from the ground shows a flat horizon fringed with trees all ways. The aboriginal turned up in the course of the afternoon. He says he saw plenty of Gemsbuck this morning at a salt-lick, to which he will guide me to-morrow.

25th.—The wild man, clad only in a very ancient Duiker skin about his shoulders, guiding us, we went three miles north-north-west, to two salt-licks, where there was lots of old spoor, but the only fresh one that of a cow. Then we turned east, and after a couple of hours struck a fresh bull spoor. This we followed for two more hours all about the plain, and, finally, into some bush where we found he had winded us while we were circling about after him, and decamped. Back to camp after this, and reached it at 2 p.m. The new wild man's conversation seems to consist mainly of e-e-e-yah, e-e-e-e-yah, and u-u-u-u-u, very drawn out and dolorous in tone. He has two wives and four children all living out in the bush, but now they have come to sleep near the wagon. I sent him some rations last night. Asked if he could eat mealie meal, he answered that he could eat anything; generally they live on roots, a sort of grass, and t'sama melon when there is no meat.

26th.—After having been out an hour we struck and followed some fresh spoor, but again the beast winded us, and got off before we saw him. These lone bulls circle about purposely, I imagine, as they are used to being tracked by the Vaalpens. Two hours later, a solitary bull lying under a tree in the midst of a bare plain, got up when we were about five hundred yards away and stared at us, and then made off. About 12.30, Hari-Hari, the aboriginal, who was in front, suddenly dropped and pointed, and I saw a pair of horn points protruding over the grass about 250 yards

away. Evidently a bull lying down asleep. The wind being tricky, I crawled towards a bush some thirty yards nearer, and well down wind. Went very carefully, and was sure it was all right, but reckoned without the mules. When I was almost at the bush, I heard "Pony" make an exclamation behind and getting up, saw the Gemsbuck making off at top speed and already too far to make firing any use. The shaking of the bits and saddlery as the mules tried to get rid of the flies, had roused him. If I had boldly walked in, I might have got fifty yards nearer, and had a shot as he got up. This seemed to be a really good bull. Later waited for another, which seemed to be coming towards us, but when half a mile distant he turned, and went off in another direction. Anyhow was not worth shooting, so far as I could see.

27th.—Saw no spoor, except old stuff, and had turned for home and was coming back along the river, when I saw a herd of Gemsbuck moving through the trees on the right. Several cows passed, and then a larger beast, which stopped for a moment. "Pony" said, "That's the bull," and I fired and killed him, the rest rushing past quite close—all cows and young animals. Disappointed in the head, as it was not as big as my first one, but had to shoot something for the boys after so many disappointments.

28th.—Broke up camp, and trekked for Pitsani.

I think I was about a month too early this year, as, owing to the late rains there is still water everywhere in the Kalahari, and no need for the Gemsbuck to come in to the river pools. I believe that May would be a better month usually.

I saw lots of old horns lying about, I suppose killed by the Vaalpens. Gemsbuck, up to two years old or so, have a fibrous outer horn which peels off, revealing the polished and thinner horn of maturity growing inside.

SOUTH AFRICA (Continued)

CHAPTER THREE

ZULULAND NYALA

By MAJOR H. C. MAYDON

THE habitat of the Nyala (*Tragelaphus angasi*) ranges up the coastal strip of South-east Africa from Zululand as far north as Beira. They do not seem to exist far inland, although I have heard of them near Zomba in Nyasaland and in South-east Rhodesia. There are several opinions as to their favourite haunts, such as stony kopjes, heavy bush near swampy rivers, and thick dry bush, but I have not sufficient experience of them to decide. I can but describe my one hunt and imagine that, in their own particular habitat, they might be found anywhere, according to season and the amount they are harried.

I found them very shy beasts who loved the dense bush, and as all such, most difficult to find. But once surprised off their guard, the stalk and shot were easy enough. This experience has been borne out by others whom I have questioned.

They seem to me both in appearance and habits to resemble closely the East African Bongo and the Abyssinian Mountain Nyala. The chief difference being that the Mountain Nyala, besides being a far bigger animal, lives as much in the open heather country of the Abyssinian Highlands as he does in the forest, and thus offers open country hunting; whilst the Bongo is also a bigger animal of a darker colour and only inhabits the very dense forest country, seldom, and only by night, entering the small open glades.

Zululand is such an easy country to reach that it is a marvel and a blessing that Nyala have not long since ceased to exist there, despite a very strict preservation. The advance of civilization and occasional organized game drives for the elimination of "Fly" do not promise much for the future.

It is a day's journey by rail from Durban to the old railhead at Somkele, along the littoral, through a low and rather flat country planted for the main part with sugar and cotton. The railway crosses a dozen broad, sandy riverbeds, whose tiny placid streams give no warning of the mighty tearing torrents that flood down after the rains and are the terror of the sugar planters and the arch foe of all bridges. Now and then a distant view of the sea can be seen to the east, while westward inland the ground slowly rises amid bush-clad kopjes and water courses and open strips of coarse grass to the far-away spurs of the Drakensberg.

Not least among the attractions of this journey are its historical associations, for this is the country of Chaka, Dingaan, and Cetewayo. In that

short railway journey of less than two hundred miles from Durban to Somkele such station names as Chaka's Kraal, Gingindhlovu, Eshowe, and the rivers Tugela and Umfolosi, each brings back its recollections; while further inland Rorke's Drift, Isandhlwana, Weenen, and Blood River are for ever marked in blood in the history of the land.

My trip to Zululand for Nyala was not pre-arranged. It was one of the occasions when chance offered the opportunity and my luck held.

I was in South Africa and I had an invitation from a friend who was starting a farm on a returned soldier settlement at Empangeni in Zululand. I wanted to see the country, and I had long yearned for a Nyala. Time was available, and a special £5 licence to shoot one Nyala bull was forthcoming, so I borrowed a rifle and a roll of blankets and set forth.

I admit that the preparations were sketchy, but I am beginning to learn that the less baggage you start with before you quit the last post of civilization the better, and that reliable information can best be obtained on the spot. Your first trip may fail, but you will acquire more reliable knowledge from the experience than any outsider can tell you.

My first impression of the country near my friend's farm from a game point of view was not a good one. Empangeni is some fifty miles short of Somkele, and every inch of the country seemed to have been taken up, if not actually fenced in. My friend's farm lay some fifteen miles west of the railway, rather beyond the sugar-cane area, which necessarily hugs the railway as closely as possible for transport reasons. He had not yet cleared it of bush nor fenced it, and was thinking of stock farming. It was rolling grass country with thick patches of bush and the deep wooded ravines of several streams intersected it. It was hot and malarial in summer, but pleasant enough in the winter.

We spent a couple of days exploring his ground with no hope of Nyala, of course, but to see what there was. There were plenty of snakes, from Black and Green Mambas and Puff Adders downwards, but very little game save Reedbuck and Duiker.

However, thanks to my friend, I made the acquaintance of Mr. Higgs, who has a large farm at Empangeni, and who has known and trekked in Zululand for thirty years. In his travels he had shot many Nyala in the old days, and had a few good heads in his house. I fancy that it puzzled him at first that anyone should be keen enough to want to make a special trip for one Nyala and nothing else, but the more we talked the more his old enthusiasm awoke. He was a true sportsman himself, and it was only the one-beast craze of the collector that puzzled him at first. After our second talk he was as keen as I was, and meant me to have my chance, and what is more, to take me to it.

Now when a man with a wife and a farm that requires his constant attention proposes to take you in his brand new car with two Kaffir boys and most of the outfit to the very place "out in the blue" that you most want to reach, what are you going to do? I'm out of the common human, and I fell. I could never thank Mr. Higgs enough, but if you asked him he would probably say, "You've got to give a hunter a hand. I enjoyed it as much as he did. Be hanged to who carried the rifle."

We railed his car as far as railhead at Somkele. There were several drifts over sandy river beds which might have given insurmountable



Plates 110—111

S. AFRICAN GAME

Top. NYALA IN ZULULAND. A VERY ELUSIVE AND HANDSOME MEMBER OF THE BUSHBUCK GROUP. ALWAYS FOUND IN DENSE FOREST.

Bottom. A GEMSBUCK IN THE KALAHARI DESERT. THE GREATEST OF THE ORYX GROUP, ONLY FOUND IN S. AFRICA AND ANGOLA.

trouble. Here and there derelict sugar mills or silt-buried and abandoned crops of cane gave evidence of the damage from ever-recurring floods.

Somkele was not a very attractive-looking place at that date, though it may have improved since the cotton boom has pushed farmers further afield. At that time it was not only railhead but the end of everything; beyond stretched a roadless waste devoted to Kaffir reserves and occasional hunting parties.

We off-loaded and repacked the Hudson car, and pushed on thirty miles that evening. There was no real road, but a wagon track marked a course northwards, running parallel to and some twenty miles inland of the sea coast. But few if any cars had been this way before, and it was necessary to pick our way most carefully, scouting forward on foot at the worst places, and sometimes laying a surface of branches over the worst sandy dongas.

The spoor of the wagons we followed had naturally chosen the most open country, along a belt of open grassy veldt fringed on the sea side of the dense bush of the littoral, and inland by the small stony kopjes which mounted slowly westward to the spurs of the Berg. Ant-hills, soft patches, deep dongas or ravines, were the worst obstacles. Water was fairly frequent, perhaps every ten miles, in streams we crossed, while at long, uncertain intervals we passed the kraals of Kaffirs in the reserves.

Higgs knew of several likely places for Nyala, the best being near the Ingwavuma River, and another place up by the Portuguese border, but one difficulty was time, as he could not spare longer than a week, and another the certainty of striking impossible country for the car ahead.

We were both happy as we made camp that night and crouched over a wood fire, digesting a rough and ready meal, and eager for our blankets. True, we missed the charm enjoyed by those who trek by ox-wagon in South Africa, the subdued and patient noises of the beasts, the calls and crooning of the voorlooper, the smell of cattle, the sense and comfort of a capacious home on wheels and the soothing knowledge of the futility of all haste.

Still, the same clean bite of the air in the open spaces, the same blue-black velvet sky lit by its silver stars enfolded us, and lulled us to sleep, while the joy of having left civilization behind us, of being free men once more with an interesting quest ahead, had added zest to life.

Next morning, after a two-hours journey of some fifteen miles, the track entered a strip of bush and we pulled up at a native kraal. This was the home of "Splendid," a fine, aged Zulu, and an ancient retainer of Higgs's. The man himself greeted us with great enthusiasm, and a voluble conversation ensued between master and old servant. Meanwhile, as I spoke very little Zulu, I alighted to stretch my legs and look round. Splendid's home, like all his neighbours, consisted of half a dozen bee-hive huts of thatch inside a fenced enclosure. One of his numerous wives, clad in beads and buckskins, was grinding mealies between two stones, whilst outside a tiny "umfaan" was herding cows, and throwing inquisitive glances at our "fire carriage." Chickens, mongrel dogs, and goats wandered at will into the dwelling-houses. Beyond the house enclosure a few meagre patches of dry maize stalks marked the extent of Splendid's agricultural ambition. The few of his menfolk who were not away in service, or at the Mines, or in the police, lazed in the shade, or with pi-dog and assegai hunted in the

jungly coverts. To the women fell the fetching of water and all the menial chores. An open glade behind stretched far back into dense bush. It was a nice peaceful life, but somehow carried no conviction. These Zulus, who made such fine soldiers, will never make good farmers.

Higgs's voice hailed me: "I have been talking to Splendid, and he thinks it is stupid to go on ahead. It is a long way to go, and the car may not reach the best places, and there has been much massacring of game lately up towards the border because of the 'fly.' He advises us to stay here, where he swears there are a few Nyala."

However, after a short talk we decided to push on and see for ourselves.

For that day and the next we pushed on steadily northward, averaging some eight miles per hour and much delayed by bad roads. We made inquiries from the few kraals we passed, but the Kaffirs themselves have poor knowledge of the rarer species of game and always pretend to know less than they really do.

We passed the wagon of a Dutchman *en route*, full of Buck skins of various sorts, freshly shot. They were mainly Wildebeest, whose hides at that time were worth from ten to fifteen shillings each.

Wildebeest is common enough in some districts, but this indiscriminate slaughter of game for the value of their skins has always worried me. There is no sport in it, and I am convinced that if you shoot off the common game, the rarer beasts will disappear likewise, despite the strictest efforts at preservation.

We halted a day in the Ingwavuma district, and there, with two local Kaffirs, I explored for game. It was very likely looking country. There was thick bush down by the river, and open patches beyond. We saw Reedbuck in large numbers, a few Waterbuck, Bushbuck, and Duiker, and the tracks of Rhino and Buffalo, but no signs of Nyala. It must have been wonderful shooting country fifty years ago, and was wilder and more attractive than anything I have seen south of the Zambezi, but it gave the impression of having been shot out. There was no sign of any of the rarer game, and the common stuff was as wild as a hawk.

Next day we moved forward again until we had registered over a hundred miles from Somkele, and we must have been near Kosi Bay. The going now was very bad for the car, and we had reached the end of our tether. We had been unable through lack of time and absence of road to reach either of Higgs's favourite places near the Portuguese border.

We spent a final day scouting and making vain inquiries and then turned on our tracks.

Even Higgs was in despair, and tried to comfort me by telling me that Selous himself had failed to bag his Nyala in Zululand, and had been forced to seek them in Portuguese country. Cold comfort when one is on the spot.

Two days later saw us camped near Splendid's kraal again, and the incredible happened. Splendid himself, whom we had summoned, arrived with a broad grin on his face, as much as to say, "I told you so," and opened a voluble conversation with Higgs. After a few moments Higgs broke it off and turned to me, raving. "Listen to this. Talk of luck and the devil. I'm hanged if this old 'skellum' Splendid did not shoot a Nyala a few hours after we left him the other day. A small herd of Nyala came grazing out from the bush into that large open patch near

his kraal the same evening. One of his people reported to Splendid, who rushed out with his gun. There were two bulls with them, and he shot one within a mile of his kraal. He wants you to see the head, perhaps then you will believe they are here."

True enough, a freshly skinned Nyala head was produced with quite good horns. My spirits rose at once from zero to fever heat, and Splendid and one of his boys were engaged at once to act as guides. As we were now within easy trekking distance or some forty-five miles from Somkele, I persuaded Higgs to go back in his car and leave me to my hunting. As I told him, he had done all that mortal man could do for me, and he had found me a place where Nyala do live. It rested with me and my luck to reap success or failure. Very wisely he realized that once on the scent, time had ceased to count for me, and that his presence and the knowledge of his impatience would only worry me, and he departed. He left me one of his boys who could cook, all the remaining stores, a small bivvy, and my blankets. There was water near by, and firewood *ad lib.*, while eggs, milk, chickens, and mealie meal could be had from Splendid's kraal. What more does man want?

It was glorious and ideal game country. Our camp by the wagon track lay on the fringe of the ten-mile strip of bush which hugs the seashore, and stretches right down to the northern bank of St. Lucia Bay. Westward the open veldt, dotted with patches of bush, slowly mounted to a range of fair-sized hills. That was Kudu country, rare enough nowadays, and strictly preserved. Our own particular quarry, being a dense-bush-loving animal, haunted the bush east of camp.

The sun was very hot between 10 a.m. and 3 p.m., but the nights and early mornings were perfect. I divided my days into morning and evening hunts, and returned to camp for the heat of the day. There were plenty of good, shady trees and insect life was not troublesome.

The first evening and morning hunts drew blank, but were encouraging. Nyala spoor was seen for the first time, and I was able to form an inkling of their habits and the best methods of hunting. It may sound far-fetched and absurd at first glance to think that there can be more than one method of hunting bush-dwelling animals. But on consideration you realize there are half a dozen ways and means. There is:

(1) Still hunting, pure and simple, when you prowl about quietly, working up wind and hope for the best.

(2) Working the edge of the forest at early dawn and late evening.

(3) Looking for fresh tracks and spooring up.

(4) Driving.

(5) Lying doggo with command of several open glades.

(6) Beating out of isolated clumps of bush.

(7) Marking down method, when several scouts are sent out in pairs to stealthily spy and report to the gun in a central fixed position.

I have known each of these methods to succeed in different parts of India and Africa, but one or two of them have always been better applicable than the others to each particular jungle and species of game. I prefer to leave it to my local hunters and then after watching their method to try to improve on it. I admit that he teaches me more than I can teach him on every occasion. Nevertheless, subconsciously one does learn a great deal, one never ceases learning, small trifling things which

cannot be described, but which at the pinch turn the scale. I do not pretend to be able to read the spoor or to find my way about a strange jungle, hence I always have a man in front of me, but since his eye must be on the ground to spoor and to find a way, mine must be the eye to spot. Again, the sahib must always find the spur to new endeavour and the brake on impatience, since if he will not shoot indiscriminately for meat the native's enthusiasm soon flags. When the moment of action comes, it is the sahib and he only who provides the cool head and by remembering the old maxim, "It's the first shot that counts," tries to avoid immature bulls and wounded beasts.

Forgive this digression to the alphabet of hunting, but after many years at the game I am still apt to forget my A B C, and each trip means at least one chance thrown away, and no boots heavy enough to kick myself with.

Now in this particular Zululand forest my luck came before I had time to definitely decide on the best method of hunting. But we had eliminated the working of the forest edge, possibly because there were too many people and herds of cattle about. Driving was hopeless from lack of beaters and unsuitable jungle. Marking down by scouts and lying doggo in glades proved unhelpful, partly from unreliability of natives, partly from scarcity of Nyala.

There remained still hunting, spooring up, and beating out of likely bits with three or four men. A combination of all three brought success at last.

It was mainly thick bush, with fairly heavy undergrowth and too many dry twigs and leaves, but there was an amazing lack of thorns for Africa, and small and large open grassy glades were common. In almost every glade little red Natal Duiker were seen. Bushbuck were rare, but there were herds of Reedbuck in the big glades, and I once saw what must have been almost a record head. Waterbuck and Reedbuck heads are supposed to run big in Zululand, and there was no question about this Reedbuck. I hovered and watched him longingly, for he would not go away, while my Zulus nearly went mad with impatience and desire of meat, but I refused to shoot. This was fortunate, for that very day I bagged my Nyala, and the noise of the shot and my gluttoned boys might have lost me the chance.

For three days we hunted in vain, and I had never seen the shadow of a Nyala. Once we were on piping hot tracks, and my boys swore they had Nyala marked in an isolated clump of bush. To peer in was like looking into a solid wall of thickets, so we tried to beat it out. Something broke somewhere, but not in my direction, and it was too unpromising to search for the spoor.

Despite repeated failure and the half-veiled contempt of my Kaffirs for a man who will never let his gun off, I was enjoying life.

To wake early in the morning long before sun-up, while there is still a keen bite in the air, and when one's first waking thought is of the prize which may be so close and which by now has grown to a significance beyond all else, is something worth doing. It sows the seed which makes one leap from a warm bed with enthusiasm, keen to taste the new day's adventure. Each morning as good as the last morning of a term at school, with the whole unknown of the first day of the holidays before one.

At last came the day which brought success.

We had had a short morning hunt and drawn blank, and I had decided

to push further afield in the evening and try new ground. So we started early, about 2 p.m., and pushed right through the jungle strip to the seashore. It was about eight miles, and we emerged on the banks of St. Lucia Bay, or rather of the lagoon which runs inland from it. It was the soul of solitude, its silence only disturbed by the lap of the waters and the trickle of a stream that fed it. It was an attractive spot with its strip of silver beach, enclosed on the one side by the blue waters and on the other by the belt of thick green bush. Here was fresh water and game a-plenty, as exemplified by the tracks of Rhino, Hippo, Waterbuck, Reedbuck, and smaller game, and one's thoughts must stray to the feelings of the many shipwrecked sailors who were cast upon this coast not so many years ago, many of whom were destined to leave their names as the pioneers of Natal.

After a rest by the lagoon we circled back toward camp. *En route* we passed a mile-long glade, with tempting patches of lush grass. This was full of tracks of all sorts of game, and Bushbuck, Reedbuck, and Red Duiker were seen. It was hopeful enough to call for another long rest and a careful spy from a hiding-place. But no confiding Nyala appeared, and at last, pressed by the setting sun, we reluctantly headed for camp. It was still a long way to go, but half-way back we should find an old cattle track which threaded the bush from kraal to grazing ground. Meanwhile, we picked our way through thin bush and from glade to glade. But we moved warily and carefully investigated each glade before we crossed it. Suddenly the leading Kaffir halted and stiffened, as a dog that strikes the scent. With a swift signal to the rest of us to crouch, he glided away into thin bush. Two minutes later came a hiss and the sight of a beckoning arm. That is the supreme moment, the essence of a long and strenuous hunt contained in a few brief moments. Rifle ready, I wriggled to his side. He pointed ahead. Through a curtain of thick grass a small glade opened in front of us, enclosed on all other sides by dense bush. On the far side, and perhaps eighty yards away, were three Nyala, a bull and two cows, quietly grazing. A glance showed that the bull was a fair head, but scrub, grass, and a failing light made it a difficult standing shot. As soon as he saw I intended a closer stalk the Kaffir went mad. Up till then he had behaved admirably, but now his excitement overmastered him, and he began to whisper and gesticulate feverishly and threatened to rush the stalk. Most natives are the same at the critical moment, and unless you can put the fear of death into him with an awful grimace, or a silent threat of murder, or a quiet cuff in the wind, it's all up with your chance. I was trying a mixture of all three when my other Kaffirs crept up and subdued him. It says much for my luck or our silence that the Nyala were still there. Ten yards ahead an ant-hill gave cover and a vantage point for a sitting shot. I reached it safely, and the climax was simple enough. Once more came the enchantment of a clean kill after a patient hunt, the never stale thrill of snapshooting and measuring the quarry and the triumphant return to camp.

My prize carried but a moderate pair of horns, but is treasured none the less. In fact, the Zululand Nyala, with his handsome shape, splendid markings, and fine neck ruff, is worthy of a high place among the big game trophies.

SOUTH AFRICA (Continued)

CHAPTER FOUR

BIG GAME IN THE EARLY DAYS

By SIR A. P. GORDON CUMMING, BT.

ONE of the earliest white men to bring African big game shooting to the notice of the public was Roualeyn Gordon Cumming. He was born in Scotland in 1820, and joined the 4th Madras Light Cavalry in 1839; but not liking India he transferred to the Cape Mounted Rifles. His inborn passion for hunting, however, was too strong, and he resigned his Commission. From 1844 to 1849 he did five trips into what was then the far interior of South Africa, shooting every variety of game and trading ivory, where no white man had yet penetrated. To quote his own words, "I was the first to penetrate into the interior of the Bama-ngwato. I should have pushed still further, but the great losses I experienced in cattle and horses prevented me from doing so." He was helped on more than one occasion by Dr. Livingstone, who was then in charge of a Mission Station at Bakatla.

He was armed, of course, only with muzzle loaders, and for his first trip his battery consisted of three double-barrelled rifles by Purdey, William Moore & Dickson, of Edinburgh—the latter two-grooved—"The most perfect and useful rifle I ever had the pleasure of using"—and one heavy single-barrelled German rifle, carrying 12 to the lb. Besides these he had three stout double-barrelled guns for rough work when hard riding and quick loading were required, several lead-ladles of various sizes, a whole host of bullet moulds, loading-rods, shot-belts, powder flasks, and shooting belts, 3 cwt. of lead, 50 lbs. of pewter for hardening the balls to be used in destroying the larger game, 10,000 prepared leaden bullets, bags of shot of all sizes, 100 lbs. of fine sporting gunpowder, 300 lbs. of coarse gunpowder, about 50,000 best percussion caps, 2000 gun flints, greased patches, and cloth to be converted into the same. He later acquired a large Elephant gun carrying 4 to the lb., and a Dutch rifle carrying 6 to the lb. Two of these weapons, the two-grooved and the six-bore, subsequently burst, but luckily without harming any one. For Elephants he used specially hardened bullets, using a composition of one of pewter to four of lead.

His transport consisted of Cape wagons. This type of wagon was a large and powerful, yet loosely constructed vehicle, running on four wheels. Its extreme length was about 18 feet; its breadth varying from $3\frac{1}{2}$ to 4 feet; the depth of the sides was about 2 feet 6 inches in front, but higher towards the back of the wagon. All along the sides two rows of iron staples were riveted, in which were fastened the boughs forming the tent, which

arched over the wagon to a height of 5 feet, with a strong canvas sail over all. The wagon was steered by a pole, called the dissel-boom, and was pulled normally by a span or team of twelve oxen, but a full second team was often needed to get the wagons through rivers and difficult places.

In spite of this antiquated material, in five years he killed over one hundred Elephants, besides numbers of every variety of the big and small game of Africa.

He was a crack shot, as it must be remembered that with these old-fashioned weapons he had to make an allowance in elevation for any shot at over 50 to 75 yards range. On one occasion he claims to have made a fine double shot, "Knocking over two old Blesboks right and left, at a hundred and a hundred and fifty yards"; and another day he shoots two Kudus and a Palla, one of the former from the saddle as he bounded past at a hundred yards.

He acquired great skill in loading in the saddle at full gallop, a feat which might test the skill of many with a modern breech-loader, especially as he was often dressed only in a shirt and the kilt. A well-trained horse was, of course, essential, and his best was named "Kirkland," and is described as the best shooting horse in Southern Africa. He understood his work so well that he would suddenly halt in full career when his rider wished to fire, if the latter merely placed his hand on his neck. He writes, "I remember having a discussion with the C.O. of a regiment of Heavy Dragoons on this subject, and we agreed that nothing can surpass a double-barrelled smooth bore. When a two-grooved rifle has been once or twice discharged, the bullet requires considerable power to drive it home, and to a mounted man this is very inconvenient. I consider that no regiment in the service was more effectually armed than my own corps, the Cape Mounted Rifles, who were furnished with short double-barrelled smooth bores, carrying 12 to the lb. and having stout percussion locks. To accelerate loading, the hunter ought to have his balls stitched up in their patches and well greased before taking the field. This was my invariable custom, and after a little practice I could load and fire in the saddle although riding at a gallop."

His courage amounted to recklessness, but it must be remembered that the game he was hunting were generally unaccustomed to guns and men. As he says himself, "The guides pointed out the herd of Elephants standing in a grove of shady trees, the wounded one being some distance behind with another Elephant, who was endeavouring to assist it. These Elephants had probably never before heard the report of a gun, and having neither seen nor smelt me were unconscious of the presence of man."

And again: "The Buffaloes crossed the valley in front of me, but by riding hard I obtained a broad-side shot at the last bull, and fired both barrels into him. He continued his course, but I separated him from the troop. My rifle being a two-grooved, which is hard to load, I was unable to do so on horseback, and followed with it empty in the hope of bringing him to bay. After following at a hard gallop for about two miles I was riding within five yards of his huge broad stern. I expected every minute that he would come to bay, and give me time to load, but this he did not seem disposed to do. At length, finding I had the speed of him, I increased my pace and going ahead I placed myself right before him, thus expecting to force him to stand at bay; upon which he instantly charged me with a

low roar, very similar to the voice of a Lion. My horse Colesberg neatly avoided the charge, and the bull resumed his course." To quote another story: "I presently beheld a bull Black Rhinoceros standing within a hundred yards of me. Dismounting from my horse I secured him to a tree, and then stalked within twenty yards of the huge beast under cover of a large, strong bush. Hearing me advance he came on to see what it was, and suddenly protruded his horny nose within twenty yards of me. Knowing that a front shot would not prove deadly, I sprang to my feet, and ran behind the bush. Upon this the villain charged, blowing loudly, and chased me round the bush. Had his activity been equal to his ugliness, my wanderings would have terminated here, but by my superior agility I had the advantage in the turn. After standing a short time eyeing me through the bush, he got a whiff of my wind, which at once alarmed him. Uttering a blowing noise, and erecting his insignificant yet saucy-looking tail, he wheeled about, leaving me master of the field."

On another occasion with a Rhinoceros he quotes: "Spurring my horse, I dashed ahead and rode right in his path. Upon this the hideous monster instantly charged me in the most resolute manner, blowing loudly through his nostrils. Although I quickly wheeled about to my left, he followed me at such a furious pace for several hundred yards with his horrid horny snout within a few yards of my horse's tail that my little Bushman thought his master's destruction inevitable." And an episode with an Elephant: "We heard her preparing for a second charge when the natives beat a retreat, but I very rashly waited to receive her and just as she cleared the cover I let fly at her forehead. Regardless of my shot she came down upon me, at a tremendous pace, shrilly trumpeting. It was a near thing, for I was burdened with my rifle and Rhinoceros-horn loading-rod, and my shooting-belt containing about forty rounds of ammunition. I escaped her by my speed, and the instant she halted I faced about and gave her the other barrel behind the shoulder." And again with a Lion: "I suddenly beheld two huge yellow Lionesses about a hundred and fifty yards to my left holding a course parallel to my own. I rashly commenced a rapid stalk upon them, and fired at the nearest, having only one shot in my rifle. The ball told loudly, and the Lioness wheeled right round and came on, lashing her tail, showing her teeth, and making horrid murderous deep growls. The instant the Lioness came on I stood up to my full height, holding my rifle and my arms extended high above my head. This checked her in her course, but on looking round and observing Ruyter slowly advancing she made another forward movement, growling terribly. I felt that this was a moment of great danger, and that my only chance of safety was extreme steadiness: so, standing motionless as a rock, with my eyes firmly fixed upon her, I called out in a clear commanding voice, 'Holloa! old girl, what's the hurry? Take it easy; holloa! holloa!' She instantly halted, and seemed perplexed, and I then thought it prudent to beat a retreat, which I did very slowly, talking to the Lioness all the time."

Another adventure with a Hippopotamus: "I took the Sea-cow next me, and with my first ball gave her a mortal wound, knocking loose the great plate on the top of her skull when she commenced plunging round and round. I was in a state of great anxiety about her, for I feared she would get into deep water and be lost. To settle the matter, therefore, I fired a second shot from the bank, which, entering the roof of her skull,



Plates 112—117

A MEMORY OF R. GORDON CUMMING

PHOTOS OF PICTURES TO ILLUSTRATE SOME OF HIS WANDERINGS IN S. AFRICA 70 YEARS AGO. FOR THE YARNS THEMSELVES, WHICH THESE PICTURES REPRESENT, SEE THE TEXT.

passed out through her eye; after which she kept constantly splashing round and round in the middle of the river. I had great fears of the Crocodiles, and did not know whether the Sea-cow might not attack me. My anxiety to secure her, however, overcame all hesitation, so divesting myself of my leathers, and armed with a sharp knife, I dashed into the water. As I approached Behemoth I halted for a moment, ready to dive under the water if she attacked me, but though her eye looked very wicked, she was stunned, and did not know what she was doing, so running in upon her and seizing her short tail, I attempted to incline her course to land. It was extraordinary what enormous strength she still had in the water. I could not guide her in the slightest degree; and she continued to splash, plunge, and blow, carrying me along with her as if I was a fly on her tail. Finding this gave me but a poor hold, I took out my knife, and as the only means of securing her, cut two deep parallel incisions through the skin on her stern, and lifting this skin from the flesh, so that I could get in my two hands, I made use of it as a handle, and after some desperate hard work, sometimes pushing and sometimes pulling, the Sea-cow continuing her circular course all the time, and I holding on like grim death, eventually succeeded in bringing this gigantic and powerful animal to the bank. My Bushman now brought me a stout buffalo-rheum, which I passed through the opening in the thick skin, and moored her to a tree: I then sent a ball through the centre of her head, and she was numbered with the dead."

An adventure with a Snake: "I suddenly detected a Rock Snake stealing into a crevice, beneath a mass of rock beside me. He was truly an enormous reptile, and having never before dealt with this species of game, I did not know how to set about capturing him. I cut a stout stick about eight feet long, and commenced the attack. Seizing him by the tail, I tried to get him out of his place of refuge, but we hauled in vain—he only drew his large folds firmer together. At length I got a rheum round the middle of his body and Kleinboy and I pulled away in good earnest. The Snake, finding the ground too hot for him, relaxed his coils and suddenly bringing his head to the front, sprang out at us with his immense and hideous mouth opened to its largest dimensions, and before I could get out of his way he was clear of his hole and made a second spring, throwing himself forward, about eight or ten feet and snapping his horrid fangs within a foot of my naked legs. I was not long in jumping out of his way, and getting hold of the green bough I had cut returned to the charge. The reptile now glided along at top speed for a mass of broken rocks, where he would have been beyond my reach, but before he could gain these I caught him two or three tremendous whacks on the head. He, however, held on for a pool of muddy water, which he was rapidly crossing, when I again belaboured him, and at length brought him to a standstill. This Snake measured fourteen feet."

Roualeyn Gordon Cumming has often been accused of exaggeration, but the other members of his family always declared that he really did accomplish all he claimed.

His method of hunting was almost invariably on horseback, generally with a pack of dogs to assist. His dogs on many occasions distracted the attention of the large game, and so allowed him to approach unnoticed.

A typical ride—this time without dogs—is as follows: "I was very much

in the dark as to the speed of the Gemsbok, having been led by a friend to believe that a person tolerably mounted could invariably ride right into them, after a long chase. This, however, is not the case. In the whole course of my adventures with Gemsbok, I only remember four occasions—that alone and unassisted—I succeeded in riding them to a standstill. I had ridden about a mile when I suddenly perceived a gallant herd of nine Gemsbok cantering towards me. In half a minute I was flying along within sixty yards of the troop, carefully studying the horns of each. After riding hard for several miles I felt my horse very much distressed, and was on the point of giving up the pursuit, when I observed one old bull make a momentary halt under a mimosa, evidently very much blown. This gave me fresh hope. I resolved to follow him as long as my horse could go, and once more I gave chase. I was soon riding within sixty yards of him and by a desperate effort I managed to cut him off from his comrades and turn his head down the wind. I at once felt that he was mine, and after another half-mile of sharp galloping I was riding within fifteen yards of him. His tongue was now hanging from his mouth, and long streaks of foam streamed back on his sides. Suddenly, on rounding a thorny bush, he pulled up in his career and facing about, stood at bay. I sprang breathless from my horse, and with a shaking hand sent a bullet through his shoulder, when he fell dead. A Boer farmer named Sweirs related instances where he had seen the Gemsbok beat off the Lion, and he had also come upon the carcasses of both, the body of the Lion being transfixed by the long sharp horns of the powerful Gemsbok. This episode occurred only four days' march from Colesberg."

Another ride after Antelope: "I shifted my saddle to 'The Cow' and we pricked along at a smart pace. We were entering a thicket of thorny bushes, when a very large grey-looking Antelope stood up under one of them. I at once knew that it was the long-sought-for Roan Antelope. Carollus quickly handed me my little Moore rifle. The Buck now bounded forth, a superb old male, carrying a pair of grand horns. He stood nearly five feet high at the shoulder. 'The Cow' knew well what he had to do and set off after him with right good will over a most impracticable country. It was a succession of masses of rock and stone and dense bushes with thorns on the boat-hook principle. In a few minutes my legs below the knee were a mass of blood, and my shirt, my only covering, was flying in streamers. At first the Buck got a little ahead, but presently I gained upon him, and after a sharp burst of about two miles we started climbing a hill, when he suddenly faced about and stood at bay. I dismounted, and drawing my rifle from its holster sent a bullet through his shoulder."

And yet again: "One day when out Elephant hunting, accompanied by 250 men, I was astonished suddenly to behold a majestic Lion slowly and steadily advancing towards us with a dignified step and undaunted bearing. Lashing his tail from side to side and growling haughtily, his terribly expressive eye resolutely fixed upon us, and displaying a show of ivory well calculated to inspire terror amongst the timid 'Bechuanas.' A headlong flight was the immediate result, and in the confusion of the moment, four couples of my dogs were allowed to escape. These instantly faced the Lion. I turned my head to ask for my shooting-horse, but my after riders had fled on hearing the first roar. After a short gallop I came up with Kleinboy, and having changed horses and got my gun from him

I rode forward to meet my grim adversary. 'Ye Gods! what a savage he looked.' He then made for the adjacent mountains, and marched in front of the dogs with his tail stuck straight out, stepping with an air of consummate pride and independence. I rode within thirty yards of him, and halting my horse fired for his heart from the saddle. On receiving the ball he wheeled about, when I gave him the second, after which he ran about ten yards and fell dead."

A ride after Elephants: "We proceeded silently for a few hundred yards, following the guide, when he suddenly pointed, and before us stood a herd of mighty bull Elephants, packed together, about a hundred and fifty yards in advance. I rode slowly towards them, and as soon as they observed me they made a loud rumbling noise, and, tossing their trunks, wheeled right about and made off. There were, with one exception, nine or ten full-grown first-rate bulls, and all of them carried very long, heavy, and perfect tusks. Increasing my pace, I shot alongside the Elephants at the same time riding well out, the better to obtain an inspection of their tusks. On account of the extraordinary size and beauty of his tusks, I pitched upon a patriarchal bull, and separated him from his comrades, driving him in a northerly direction. There is a peculiar art in driving an Elephant in the particular course which you may fancy, and, simple as it may seem, it requires a hunter to know what he is about. At length, closing with him, I dared him to charge, which he instantly did in fine style, and as he pulled up in his career I yelled to him a note of bold defiance. The ground being favourable, I opened fire. He soon evinced strong symptoms of approaching death and stood catching up the dust with his trunk and throwing it in clouds above him. I dismounted from my steed and availing myself of the cover of a gigantic nwana tree I got within twenty yards and gave him right and left behind the shoulder. These two shots finished him, for on receiving them he backed into the cover and I heard him fall over heavily."

The following is an instance of how his dogs distracted the attention of the Elephants from himself: "They charged upon us from opposite directions and we were actually in the very middle of them. They were extremely fierce, and, but for the dogs, not a man of us would have escaped. Fortunately, the dogs which they seemed to think designed the capture of their calves, engrossed their whole attention; whereas by reason of the colour of the horses on which we rode they took us for gregarious creatures like themselves; and actually grazing our animal's haunches they left us scatheless, and pursued the dogs."

He must have been immensely favoured with luck in not having more accidents or loss of life than he actually had. Apart from fever he never suffered any serious injury. A Mr. Orpen who was with him on one occasion, was mauled by a Leopard, and one of his men was taken during the night by a Lion; he also lost a horse from the same cause. Apart from this there were no serious casualties.

The quantities of game which he met with in places which are now in the middle of civilization are hard to believe.

Within one day's march from Colesberg he found game in herds exceeding anything he could conceive—Springbok in troops of at least ten thousand; also large bodies of Quaggas; Wildebeest, Blesbok, &c. He describes the migration of Springbok which he saw within 30 miles of the

Orange River: "This was, I think, the most extraordinary and striking scene that I have ever beheld. For about two hours before daylight I had been lying awake in my wagon, listening to the grunting of the Bucks within 200 yards of me, imagining that some large herd of Springboks was feeding beside my camp; but on rising I beheld the ground to the northward covered with a dense living mass of Springboks, marching slowly and steadily along, extending from an opening in a long range of hills on the west, through which they continued pouring like the flood of some great river to a ridge about a mile to the north-east over which they disappeared. The breadth of the ground they covered might have been about half a mile. I stood on the fore chest of my wagon for nearly two hours, and had some difficulty in convincing myself that it was reality which I beheld. During this time their vast legions continued streaming through the neck in the hills in one unbroken phalanx. Vast and surprising as was the number of Springboks which I had witnessed that morning it was infinitely surpassed by what I beheld on the march from my vlei to old Sweirs' camp; for, clearing the low range of hills through which the Springboks had been pouring, I beheld the boundless plains and even the hillsides thickly covered not with herds, but with 'one vast herd' of Springboks. As far as the eye could strain the landscape was alive with them, until they softened down into a dim red mass of living creatures. Old Sweirs acknowledged that it was a fair 'trek-bokken,' but observed that it was not many when compared with what he had seen. 'You,' he remarked, 'saw only one flat covered with Springboks, but I give you my word that I have ridden a long day's journey over a succession of flats covered with them, as far as I could see, as thick as sheep standing in a fold.'

And again, near Bakatla: "Suddenly we beheld a numerous herd of Buffaloes grazing on the open plain. We reckoned there might be between six or eight hundred of them. As I drew near they stood gazing at me for a minute, when the whole herd started off together. Their amazing numbers greatly impeded their progress, so I had no difficulty in keeping alongside, and as I galloped along I endeavoured to select the finest head. In the course of the day I saw a fresh spoor of about twenty varieties of large game, and most of the animals themselves, viz. Elephant, Black and White Rhinoceros, Hippopotamus, Camelopard ('Giraffe'), Buffalo, Blue Wildebeest, Zebra, Waterbuck, Sassaby, Koodoo, Pallah, Springbok, Bushbuck, Wild Boar, Duiker, Steinbok, Lion, and Leopard. This part of Africa contains a larger variety of game than any other in the whole of this vast tract of the globe, for, besides the game which I have just noted, the following are not uncommon, viz. Eland, Oryx, Roan, Sable, Hartebeest, Klipspringer, and Gry's Steinbok; the Reitbok is also to be found.

"One day I counted no less than twenty-two Rhinoceroses, nine of which were in one herd."

On another occasion he writes: "Ten days after we left Colesberg I beheld with delight one of the most wonderful displays which I had witnessed in South Africa. On my right and left the plain exhibited one purple mass of graceful Blesboks, which extended without a break, as far as my eyes could strain."

On his return to England Gordon Cumming made his living by showing

his collection all over the country; besides trophies it included some Hottentots and a Kalahari Bushman. But the hardships he had undergone had undermined his constitution, and he died in 1866 at the age of forty-six. At his death his collection was sold. A large part of it was bought by Messrs. Barnum & Bailey, and was unfortunately destroyed in their great fire.

PART THIRTEEN

SOUTH-WEST AFRICA

By COL. H. G. C. SWAYNE

THE South-west Africa Protectorate, formerly a German Colony, is now administered under mandate by the Union Government of South Africa.

Windhoek, the capital, is reached by rail from Swakopmund in one day, or from Capetown in three days. Sea passage from England by the Union Castle or by Hamburg-Amerika Line. The latter, carrying many Germans, has the advantage that you can get information of the Colony while on board.

For information, there is the *Union Castle South and East African Year Book*. Moreover, the South African offices in Trafalgar Square, London, issue a brochure of South-west Africa containing maps showing distribution of game, agricultural conditions, etc.; also to approved inquiries, this offers official introductions which may help the traveller.

Windhoek is 5600 feet above sea level. It has British and German stores, with canned groceries, tailoring, chemists, photography and opticians, and rifle-dealers, German and English, who are in touch with Capetown importers.

The Administration buildings are beautifully sited on a hill. There are hotels, churches, hospitals, and a good Zoological Garden.

Every official help is given to tourists, and cattle-farmers of all nationalities are most hospitable, but one should also be self-contained, and prepared to bivouac out for weeks at a time. Tents are unnecessary, as the soil is sandy and little rain falls during the shooting season, which is from 15th April to 15th September.

Regular servants may be Hottentots or Klip-Kaffirs; sometimes Hereros or Bushmen may be employed for particular purposes.

Transport of Cape carts drawn by oxen or mules can be hired, and fresh supplies bought, at some of the farms. Some sportsmen, for long-distance transport, buy a Ford or Chevrolet van or light lorry, and sell it on arriving at their destination.

On the map the Protectorate is shown bounded on the west by the Atlantic Ocean; east, the Kalahari Desert; north, Portuguese Angola and Northern Rhodesia; south, Orange River and Cape Colony.

The watershed of the country rises to nearly 8000 feet, and, while the northern border districts are tropical and feverish in summer, the Namib or coast belt, about forty miles wide, is nearly uninhabited desert with only one inch of rainfall. Inland the rainfall varies from 22 inches in the north to 6 inches in the south.

The summer temperature at Windhoek is 60 to 100 degrees Fahrenheit; in winter, 16 to 82 degrees.

It is between four and five hundred miles between the most easterly farms of South-west Africa and the most westerly ones of Bechuanaland, the Kalahari lying between.

The grass being dry but of excellent quality both for cattle and game, the latter carry trophies as good as those of any of their species in other parts of Africa. In the Sandveldt, bush prairie covers great areas, the scattered thorn and other bushes being about twenty feet high or less. Hunting is pleasant, and the land, whether already allotted to farms and fenced, or not yet allotted, or merely broken, wild country unfit for allotment, is, except at the farm dwellings, in its primitive state, and game roams where it will.

Towards the north-west is the Kaoko veldt, ground broken by deep ravines, dry washes which are liable to be scoured after rain, and boulder-strewn, low hills. In these ravines are strips of higher trees and dense undergrowth suitable for the wanderings of Elephants.

There are four game reserves, where no shooting is allowed except with very special permission. They are at the Etosha Pan; also near Grootfontein; Walvis Bay; and, in the Kaoko veldt, respectively.

Good shooting-headquarters are Otjiwarongo, Waterburg, Outjo, and Okahandja, the former the centre of the Herero nation.

The bulk of the Protectorate shows on the map as a jig-saw puzzle of farming areas, comprising each from fifteen square miles up to as much as some hundreds on the largest farms.

The simplest type of residential farmhouse may be merely a block of single-storied, whitewashed barns near a convenient cart-track and spring, where you will find a couple of bachelors living on Antelope meat or beef, home-made bread or flapjacks, and coffee. They may own a couple of riding horses, about three hundred cattle, and keep a few Kaffirs to move them out to pasture or bring them in to water in the evenings.

The vast domain stretching away from the farmhouse is primitive scrub and yellow grass and, in a morning's stroll, you may come on the few groups of cattle, or even more often, little families of game. The latter break boundary fences and seem to wander about the country exactly as they did before man came to these wastes.

A typical large farm is more highly organized, with every kind of garden produce, orange orchard, water-raising windmills for irrigation, fenced corrals; while the farmhouse itself is a pretty bungalow in which the owner and his family keep a luxurious table. There may be a German mechanic or two looking after the car and other machinery; a thousand or more head of cattle; and some of the children may be absent at a South African college or university.

But the character of the great domain with its boundary fence stretching away for miles is the same. The farm may be more than a hundred miles from the nearest railway.

Near a railway line itself several small farms may be grouped nearer together, with a bungalow hotel, a couple of general stores, one of which is kept by the hotel; also schoolhouse, reading-room, bank, tennis courts near by, and all being the centre of a certain amount of social life.

Every farmer has a small car or light lorry, and they think nothing of visiting eighty miles away for business or pleasure, and returning by

moonlight; practically following a previous car track or making a new wheel track themselves, crossing dry water courses at new spots, beating the undergrowth under the chassis, becoming stalled in deep sand and having to get out and push. Everywhere in Africa cars are experimenting with new routes. Week by week gangs come out of the villages to assist some car over a drift, and Africa is rapidly being furnished with serviceable unmetalled tracks, constantly improving.

At night, Hares, Ostriches and ground game may be seen scuttling across in front of the car lights.

For those who have no ambition to explore new territories or new tribes, but are content to study natural history or hunt in a civilized country, South-west Africa is a veritable "hunter's paradise," as the game is quite wild and well stocked owing to excellent game-laws, really enforced.

Once the matter of introductions to ranchers is got over, everything is easy. Some slight knowledge of German is, however, necessary.

I confess I was extremely lucky, when on board ship, to meet a German fellow-passenger, Mr. Louis De Fries, who was giving a lecture, with screen photographs, to the passengers. This gentleman was an adept at leading big-game expeditions, had discovered at least one Antelope, which bears his name, and had had personal experience as a farmer and miner.

He was there when I visited the Protectorate, at Otjiwarongo, or at Omaruru, or sometimes at Grootfontein. We arranged an extended trip together to the north-west of Otjiwarongo, which is connected by rail with Windhoek. I only helped with transport and provisions, so it was a cheap trip for me; and without his help I could not have got on at all, as he was equally at home with Germans, Englishmen and Dutchmen, while I knew next to no German, and no Dutch at all. The time was May, June and July, which is the best season for hunting.

Royal Game.—Elephants, Rhinoceros (*Bicornis*), Giraffe, Eland, Paaw (Bustard) and Khooran; most of the above being found in the Kaoko veldt in the north-west.

Carnivora.—Lion, Leopard, Cheetah or Hunting Leopard (*Juabatus*), Hyenas, Wild Dogs, Jackals and Foxes. Of these most are said to be on the sandveldt towards the edge of the Kalahari. The Cheetah has an exceptionally beautifully marked skin compared with the Cheetah elsewhere.

Ordinary Large Game.—Roan Antelope (*H. equinus*) are rare; Gemsbuck (*O. gazella*), Kudu (*Strepsiceros*), Blue Wildebeest (*Taurinus*), Hartbeest (*B. cama*), Zebra, Wart-hog, Ostrich, Springbok; and Impala and Reitbok by Ovamboland rivers.

Of the above, the Gemsbuck is the finest of all the Oryx tribes of Africa, carrying splendid horns. In north-west of Outjo 38 to 40 inches are not uncommon, those of cows being more slender and two inches longer, and they are quite plentiful, though very wary. Some of the Kudu carry as good horns as any found in Africa, and in South-west Africa they are widely distributed wherever, on hill or plain, there is bushy country with broken ground near. Eland horns run to good measurements, and they are plentiful in suitable localities. Ostriches are everywhere and can easily be shot, but the feathers are, I believe, practically valueless, owing to change of fashion.

In each district annual lists are issued of the number of each species of large game that may be shot in its area.

Smaller Game.—Bush Pig, Duiker (*Grimmi*), Steinbok (*Campestris*), Sandgrouse, Guinea-fowl, Francolin, Wild Pigeon, Geese, Duck and Teal.

Licences.—The ordinary large-game licence for non-residents is £25; that for small game is £3 for the shooting season (15th April to 15th September).

A typical day's hunt I had in the Kaoko veldt will illustrate the possibilities of that region of the north-west, beyond Outjo. My companion and I were the guests of a hospitable German couple at their fine farm, bordering on some wild ravines sloping coastwards.

Every evening Kaffirs drove some five or six hundred cattle to the troughs at the well situated at a hundred yards' distance from the farmhouse. These Kaffirs had complained that they had lately been frightened by Elephants, which every few months were wont to wander up the river beds at night and drink at the troughs, hanging about the bush till late at night to doze.

On the afternoon referred to, we, with two natives, started on foot down one of the valleys trending westward, the banks of the dry river bed rising to boulder-strewn hills about two hundred feet high.

We had not walked far before we came on recent spoor of a bull and cow Elephant, in fact we had been seeing the traces of their presence for some days. But we had taken out no Elephant licence.

After going five miles, as we were passing a bushy island surrounded by dry sand, the appearance of two dry dock-leaves rising about eighty yards away above the yellow grass, attracted my eye subconsciously. Ten yards farther on I stopped, and said quietly to De Fries: "I wonder if there was something back there. I'll look again." We both did so. For quite a long time the dock-leaves were still and did not wave in the wind, and we were just walking on again when I saw the tip of one of the supposed dock-leaves twitch.

Next moment my companion fired. Instantly the legs and tail of a Leopard swung into the air above the grass in a circular somersault. After a consultation we crept round a boulder and found a large and beautifully marked female Leopard lying dead.

While I watched one native skin it, De Fries, with the other, searched the island for spoor, thinking there would be her mate about somewhere. In due course I heard his shout, "Look out," and a rustle at the far end of the island showed that the male had escaped.

I did not see my companion again for over an hour, as, among a maze of boulders, I became interested in watching a family of Kudu. The Buck had rather a poor head. Then I heard three shots in rapid succession from a spot a mile away, and hurried over the rough hills, to find De Fries standing over the blood spoor of a third Leopard. It was not far from sunset, and this spoor led us into a network of boulders and caves, among which we checked, owing to his blood having ceased. It being now late, we started for home. On the way I got a welcome addition to our host's larder, a bull Kudu with very fine horns.

The climax of our hunt came about nine o'clock, when by starlight we had left the river bed and were threading thick bush within a mile of our host's farm buildings.

We heard a swish among the trees; De Fries abruptly gripped my elbow and whispered: "Elephants!" He side-stepped to the left into a little, open glade and sat down on a flat stone, while I, at the same time, had jumped or fallen to the right among boulders as large as tables and choked with thorns, losing my hat. Then I crawled over to De Fries. He whispered: "Wait for him. We must try his head if he comes." He had, I think, heard a trumpeting, and seen the loom of a pair of white tusks. There was a deep silence for some minutes, and those who know the ways of wild Elephants, as we both did, know how silent they can be after the first excited rush. But nothing more happened!

It took a long time getting to the farm in the dark thickets. We had to exercise great caution, as we had no indication whether the Elephants were between us and the farm or not.

Hatless, and with my face bleeding from thorns, I met my hostess in the passage to the kitchen, and remember her horrified look. She then took us straight in to supper, dirty as we were.

Next day my hat was recovered, and the discovery also made that the bull had come within a few yards of us, and, as the cow Elephant had wandered down a game path away from the farm, he had changed his mind and followed her. The excitement of the meeting lay in the fact of the poor light and difficult ground, as we should have been practically helpless had they come on.

PART FOURTEEN

ANGOLA, PORTUGUESE WEST AFRICA

By H. F. VARIAN

THE Portuguese Colony of Angola occupies a large portion of tropical and sub-tropical West Africa, south of the Equator. It is situated approximately between 6 and 17 degrees south latitude, and extends from about 12 to 24 degrees east longitude. Contained in this is an area of some 480,000 square miles, with a coast-line of 1500 miles.

On its northern and north-eastern side is the Belgian Congo; eastern and south-eastern is North-western Rhodesia, and on its southern side is South-west Africa. Its climate generally is very good. The coast, for the most part, is washed by the southern currents from the Antarctic; it is therefore considerably cooler than those countries in similar latitudes on the east coast, that are washed by the northern currents from the Bay of Bengal. The littoral is tempered also by the southern winds, and therefore comparatively dry and waterless, with very little rainfall.

In Angola this dry belt extends inland for from 50 to 100 miles, narrowing in to the coast and merging into more normally watered country, north of Lobito, and south of Loanda, where the southern currents begin to lose their effect. The flora and fauna undergo a change on the coast in those regions. Allowing for the difference in latitudes the flora and fauna are similar to the dry countries of the Kalahari and South-west Africa, of which the dry coastal belt is a northern extension, narrowing in towards the north.

Part of the belt to the south, near Mossammedes, are dry sandy deserts, north of the Cunene River, with practically no rainfall at all. Near Lobito it averages from 10 to 15 inches per annum, which increases to the north of the country. In this area the heaviest falls are between February and the beginning of May, the maximum being generally at the end of March and the beginning of April. Both the flora and fauna in the coastal areas are naturally different to those of the high plateau.

The greater part of Angola is a high plateau, whose western side begins from 100 to 200 miles from the coast. On the main plateau are the sources of some of the principal tributaries of the Zambezi, flowing to the south and east, and of the Congo to the north. The basins of the Quanza, which flows out south of Loanda, and that of the Cunene River, which forms the southern boundary of the country, lie wholly in Angola.

The average height of the main plateau is from 5000 to 6000 feet, falling away to the north and south with the basins of the various drainage systems. The climate on the plateau is excellent, somewhat similar to that of North-western Rhodesia, but more tempered by its proximity to the Western Ocean. It is never unduly hot, or excessively cold, although at times frosts are experienced at nights in July, when it can be bitterly

cold. The whole of the high veldt is extremely well watered, possibly one of the best watered countries in Central Africa.

The rains are from the east, and fall, from light showers in October to heavier rains in January, generally with thunder in the afternoon, but dry in the mornings. From January there is usually a dry spell for several weeks before the heaviest rains of the season, which fall about the end of April, and the beginning of May. May to October are usually without rain. The annual average in the high country is about 50 inches. The grass on the plateau generally starts burning at the end of May, and the country is practically burnt off by the beginning of July.

Extending as it does over such a wide area, Angola contains, with the exception of equatorial forest, practically every type of country that is found in Africa. The wild life and fauna that range over this wide territory in varying quantities are therefore similar to those of other parts of Africa in the same altitudes and latitudes; there are also to be found a number of species that are peculiar to the country, of which mention will be made later. Owing to the wide distances that separate the various species, and the inaccessibility of those territories in the south-east, where the commoner types of game are most abundant, the country is one that is more for the specialist, as distinct from the usual shooting trip, where a bag is the objective, than those countries where conditions are easier. As a general rule, specimens peculiar to Angola need earnest and careful hunting.

The present scarcity of game in the more accessible parts is partly accounted for by the fact that after the first Boer War a number of Boers, dissatisfied with English rule, trekked across from the Transvaal. This took them some three years, and, after awful hardships settled, in the early 'eighties, on the highlands of Angola. From that date, until 1928, when they were repatriated to South-west Africa, they existed principally by hunting and shooting, with a certain amount of transport riding. In those districts, wherever it was easy to penetrate the country with a wagon and oxen, which in many cases was their only home, very little game is to be found to-day. It is said that prior to the advent of the Boers, game was very abundant in those likely looking parts, which, owing to their suitability, should be full of game. The rinderpest also accounted for a great number, especially the Buffalo and Kudu. The plateau is extremely well populated, and until recent years, every native carried a gun, with ammunition easily available, which also caused some of the game extermination.

Now that the Boers have left the country and the natives are no longer allowed to carry arms, if the new game laws are properly enforced there is a possibility that those parts of Angola which have been denuded of game will recover to some extent.

The coastal country has no swampy flats, which are a feature of those countries on the opposite side of Africa; the actual shore is mostly of barren limestone cliffs. The low veldt of the immediate hinterland is mostly dry scrub and thornbush, with baobabs as a general part of the landscape. The country is intersected with steep ravines and sandy stream beds, most of which are dry, but some have water obtainable only by digging.

The middle veldt, from 1500 to 4000 feet altitude, is generally better watered, with thicker bush and vegetation. This type of country, which



Top Left. FOREST HOG.

Top Right. ROAN ANTELOPE.

Bottom Left.

ONE OF THE FINEST TROPHIES OF AFRICA. ONLY FOUND IN ANGOLA.

ANGOLA GAME

is more or less undulating, continues to the final rise of the main plateau, which is somewhat abrupt in places. The plateau, or high veldt, is from 4000 to 6000 feet in altitude, and very similar in character to the countries of the same altitude in Northern Rhodesia, Southern Congo, Nyasaland, and Tanganyika Territory. There is the usual scrub, orchard-like bush, with open vleis, or dambos, with light undergrowth, but in Angola, above 6000 feet, is open undulating treeless country, which gives rise to the principal rivers, west of the Quanza River. One of the largest of these open spaces, on the headwaters of the Quanza, Cunene, and Cubango Rivers, is known as the Bula-bula. It was near here that one of the principal settlements of the Boers was established, and is said to have been, at one time, teeming with game; now, with the exception of a few Oribi and Reedbuck, there is nothing to be seen.

On the plateau, as in similar countries where the rains are the same, there is a natural close season, caused by the long grass, which exists from November to June, when shooting or hunting is rendered practically impossible. In the coastal area, however, it is possible to hunt all the year round, and, in fact, some of the best months are during the rains, when the sweet grass of the limestone countries, together with the water in the rocks and sandy beds of the rivers, attract the game to those parts.

The uninhabited coastal belt is a country of the "unexpected," and like similar country in Africa is by far the most fascinating, from all points of view. In this area some of those species to be found only in Angola have their homes.

Captain Gilbert Blaine, M.C., the distinguished African hunter and naturalist, spent many months in various parts of Angola. The results of his expeditions, with descriptions of game examined by him, were given in a paper before the Zoological Society in June 1922. His vivid pen pictures of the various countries and districts with the new species to be found in them, are so interesting that the following extracts are given below, for the benefit of those who may be interested in the country generally. His first description is of the Giant Sable Country, west of the Quanza River, which is typical of those countries at about 4000 feet altitude.

" . . . The Angolan Sable Antelope (*variani*) is found in the strip of country enclosed by the upper waters of the Quanza River, and its eastern tributary the Luando, and it is said on good authority to occur between that river and its western tributary the Cutato, all three rising in the great central plateau that divides the Congo from that of the Zambezi. East of the Luando the country is barren and sandy, although well watered, being locally known as the 'Hungry Country,' and all reports, both native and European, tend to prove that the range of the Sable does not spread beyond the confines of these rivers, and certainly not across the watershed. It is therefore very restricted as to locality, and this circumstance may account in part for its highly specialized development. Colonel J. C. B. Statham, who penetrated into this country from Malange in the north in quest of this Antelope, did not encounter it in any large numbers until he reached the region in which I procured all my specimens, viz. some 70 miles south-east of the junction of the Quanza and Luando. The distance between these two rivers is about

30 miles, with a low, flat, ironstone ridge forming the divide, being steepest towards the Quanza, from which it is distant about 10 miles.

"The elevation of this country is roughly between 3500 and 4000 feet. The Sable are mostly found on the Luando side of the watershed where several streams rise, such as the Luce, the Kaluando, the Dunde, and the Lusinge, the latter being salt and forming a group of salt pans, known to the natives as 'O'Chisongwe.' This area is covered with an extensive bush-forest, having narrow plains bordering the rivers and strung along the headwaters of the streams, and intervening here and there as round or oval openings, termed 'dambos.' The trees vary in density, but nowhere is it possible to see more than 300 yards ahead between their massed trunks. The undergrowth is light, consisting of little low seedlings of bush a few feet high, and a fine, soft, sparsely growing grass, which is the principal food of the Sable. There are also extensive beds of a low leguminous plant with a dull pink flower, on which the Sable occasionally browses, and numerous bulbs and tubers, with some very beautiful flowers. The ground is thickly carpeted with dead leaves, and studded at intervals with enormous termite mounds, upon which grow trees and bushes. The soil is a sandy loam enriched with leaf mould, giving place on the dambos to the usual sun-baked knobbly grey clay, where a hard, coarse grass grows which the Sable never seems to eat. They were partial to the denser parts of the forest, and especially where certain trees are abundant, probably several varieties of *Cassia*, including the graceful *Cassia occidentalis* and *Huapaca gossweileri*, a tree of stiff-set habit, having large, expanded, racket-shaped leaflets radiating from one stem like those of the horse-chestnut.

"The numbers in a herd vary from about eight to twenty individuals, about half of them being bulls. Two young bulls are frequently to be met consorting together by themselves, always very shy and wary. They have probably been driven out of the herd by a jealous old bull. The sentinel of a herd was nearly always a young bull. They no doubt make the best guards from experience gained when running singly or in pairs in the forest. I never encountered an old bull by himself. In a small herd there is usually only one big black bull. In large herds there may be two and quite a number of young bulls ranging from sub-adult, nearly black ones, with half-developed, upright horns, to younger ones of a dusky-tawny colour.

"The herds of Sable at this period of the year, viz. September to December, do not move about a great deal, and it was possible to walk a long distance of 8 to 10 miles through the forest without crossing a single fresh track, and yet within the circle so described two or three herds might be harbouring. As referred to above, they confined themselves to certain sections of forest which could always be recognized by the kind of trees of which it was composed, and the art of finding the Sable was a question of keeping within the limit of these trees.

"Unless disturbed, a herd remains in that section in which it has established its feeding and resting quarters. Grazing through the early morning till about 9 a.m., it wanders off to a denser patch, where it rests till about 3 p.m., the whole herd lying down rather scattered, and often without a sentry.

"No concise information relating to the breeding habits was obtainable,

but no small calves were noticed running in the herds, and as the big bulls were all with the cows, it might be inferred that the autumn is the rutting season (*i.e.* early spring in south latitudes, September to December). One afternoon I had a herd under observation in some thick forest, and noticed the old bull apparently taking stock of his cows. He rounded them up one by one, driving each to the front, and then turned back to fetch another. His methods were rather autocratic, for he ran at the cow and butted her behind with the front of his horns if she was at all inclined to loiter. Having passed them all in review, he followed sedately in rear of his protégées.

"The big bull is generally somewhere in the background, that is to windward, and it is difficult to see him—black among black shadows and lattice of black tree-trunks. He spends a great deal of his time lying down, but often a great pair of curving horns rising directly above the undergrowth discloses his position.

"The brilliant chestnut cows, on the other hand, easily catch the eye. At intervals one or another, generally a young one, gets on its legs and begins to graze, and then lies down again on the same spot. At length all rise together as by a preconcerted signal, and wander off slowly grazing.

"Their drinking habits were not noted, but as sufficient water was always obtainable from pools in the stream-beds in the high forest, it is probable that they drink regularly. They did not appear to go down to the Luando to drink.

"The bulls have a habit of rubbing their great horns on the bark of saplings and small trees, the branches of which they break off. This action imparts to the horns a red, tan colour, very beautiful in contrast with the velvety blackness of the skin. They also, after soiling, invariably scratch with their hind feet, *more canis*, cutting long grooves in the earth. The rubbed bark, broken branches, and sapling tops hanging head downwards from the stem by a strip of bark, together with the furrows scratched in the soil, are a certain indication establishing the presence of Sable in distinction from Roan Antelope. The latter occasionally go through the same performance of scratching, but not so regularly as the former, and do not break down branches with their horns. It takes some experience to distinguish between the spoor of the two species. Roan, however, have rather a longer hoof, with the toes sharply pointed and separated at the tips. It is also longer, if that of an old bull. Sable have a hoof wider at the heels with blunter toes, the outer toe in bulls being usually worn square at the tip. The spoor of herds is easy to distinguish, cow Sables having a neat triangular hoof resembling that of Waterbuck.

"The Roan also do not frequent the same parts of the forest in which the Sable make their home, preferring the smaller, thinner, and more open tree-bush in the vicinity of the dambos, which are their feeding grounds. Sable do not seem to care for the dambos, and when moving through the bush, usually make a detour inside the edge of the cover rather than face the open space, especially when alarmed. On first being disturbed they do not run far, but stop to look back from the shelter of any convenient thick cover, and if then not followed too hastily, will generally settle down, and may be disturbed several times without going far, leaving a sentry posted. But if one of their number has been shot, the herd will keep going for a long distance and clear out to another part of

the forest. When wounded a Sable is extremely wary and difficult to approach, and before lying down is careful to select a good position from which to guard its back tracks. In this country they have few natural enemies, such as Lions or Wild Dogs.

"The country is thinly populated, the villages of the natives, the Luimbe, being few and far between. They are a poor race, cultivate scarcely at all, and at the time of our visit were subsisting mainly upon wild fruits and honey. They had no cattle, and very few sheep and goats, but a recent survey has pronounced the country suitable for ranching purposes, the fine quality of the herbage, coupled with the salt licks, making ideal conditions for cattle raising. All these causes no doubt have combined to favour on special lines the Great Sable.

"The only other Ungulates observed in the country were Roan Antelopes, Reedbucks, Oribi, on the small plains; and a Grimm's Duiker, identified as *Sylvicapra grimmii leocoprotopus*, which were numerous in the forest. The fresh tracks of a troop of four Eland appeared for several days, but these were probably visitors to the salt pans.

"Adult Sable bulls have a peculiar pungent smell which pervades the whole animal and clings to the skin for weeks after death in spite of daily exposure to the sun and wind. It resembles a vegetable rather than an animal smell, and suggests the aroma of the bush itself, although not of any particular plant. They are also covered with several kinds of ticks, which are very numerous on the neck and shoulders, where the hair is worn thin in consequence. The younger bulls had fewer ticks and the cows fewer still. . . .

"... Between Benguela and Mossamedes lies a wild desert region of rock, sand, and thorn-scrub, almost waterless and uninhabited save for the presence of nomad Baquando, half negroid, half bushmen, who roam over the country with their herds of goats, and a few Portuguese and native fishermen existing from hand to mouth along the beach.

"There is a deserted sugar factory at Equimina, its spacious and not unimposing façade rising above a close-set tangle of tropical bush and old overgrown gardens near the middle of a wide and pleasant bay, one of the few places along this coast possessing a supply of good fresh water. At one time the site of a prosperous plantation employing considerable native labour, the place has now shrunk to a small, untidy village, harbouring an uncouth assortment of beach-combing blacks and two or three Portuguese fishermen.

"In the next bay to the south, called Elephant Bay, distant sixty miles from Benguela, a whaling-station has been established by a Norwegian company.

"Mr. Tyler Thompson (who has since died), an Englishman well known in Angola, had been in charge of this whaling station during the War, and it was here that I landed, after four consecutive days and nights spent in an open fishing-boat, tacking up against contrary winds from Benguela. It was some relief to disembark on the threshold of an Englishman in the otherwise inhospitable wilderness.

"Mr. Thompson, being an old Elephant hunter with an intimate knowledge of the game of the country, was able to give me much valuable help and information, and I am indebted to him for the success of my hunting excursions in this difficult country. A supply of good water in

small barrels, and fresh fruit and vegetables from his carefully tended garden at Equimina, sent up to my camps by relays of carriers, helped to smooth over many minor discomforts, and enabled me to look back upon this trip as one of the most interesting and delightful of my African adventures.

"Without some elementary knowledge of geology, it is difficult to give a description of a country whose outstanding features are bare rock and sand. Having very little, I must, therefore, be excused for a tentative and sketchy account of its outlines, which are so strange, wild, and rugged as to merit a description.

"After passing the mouth of the Caporollo River below Dombé Grande, the littoral plain disappears, and gives place to high limestone cliffs alternating, as at Elephant Bay, with red sandstone. The coastline here is indented with small bays bordering bush-covered sandy flats, which run inland for a space of two or three miles and are bounded by cliffs. Numerous dambos, or dry water-courses, debouch into these bays through steep defiles worn in the encircling walls of rock. Access to the country behind is only practicable up one of these dambos, as any attempt to climb to the top of the cliffs and thence proceed across country involves the surmounting of an appalling series of obstructions; but by plodding patiently along a dambo through its intricate windings, one is eventually rewarded by reaching a country where it is possible to follow the direction that one fancies.

"The lower reaches of these dambos are contained by perpendicular walls of 'pudding-stone' conglomerate. As they continue upwards, the cliffs give way to precipitous slopes of cretaceous rocks. Finally becoming shallower, they pass between undulating ridges covered with loose stone and shale, merging on to sandy flats, whence they break into a network of dry water-courses.

"At this point the terrain expands into many little plains, which are more or less confluent, having a central nucleus traversed by an uninterrupted level stretch from twelve to fifteen miles long. These plains spread laterally into irregular bays and gulfs, and send out long corridors through rocky defiles to end in dambos which lose themselves among the hills. Encompassing them on every side are steep, stony ridges and conical kopjes, built up of gneisses and mica-schists, with huge outcrops of white quartz occasionally crowning their summits.

"A moraine of loose fragments of glistening white quartz litters the lower slopes between the hills. Elsewhere large surfaces of undulating ground are thickly spread with the same debris, which reflects a blinding glare from the pale metallic blue of the sky.

"There are no trees to cover the nakedness of the land, but pale green thorn-bushes of the wait-a-bit variety, nearly all having hard-hooked thorns, with cactus and euphorbia, are dotted more or less evenly about this country, the peculiar features of which in their disarray appeal strongly to the imagination. Here Pelion has been piled on Ossa, there Ossa has heaved up and overthrown Pelion, so fantastically and in such confused masses do the hills range themselves or fall asunder into island groups and solitary kopjes in sandy wastes.

"Some fifty miles inland from the coast and dominating all this region is a vast mountain rising in two blocks from a sunken plain to a height of

5000 feet or more. It is crowned with towering precipices of bare rock fluted with perpendicular fissures, while its flanks and base are covered with a downward-spreading forest of thick bush.

"Owing to the restraint put upon my mobility by a crew of untrustworthy carriers who terminated their contract by running away, I was unable to reach this mountain (Uambo), which would well have repaid a visit. It probably stood at the inland limit of the desert region.

"There is no surface water, but by digging in some of the dambos it is possible to find water in certain places. Most of it is brackish and unfit to drink, and in the lower reaches of the dambos a brackish water often oozes out of the sand and trickles for a few hundred yards, to be again absorbed. Water was, however, available from used water holes near the two camps I made in this locality, the farthest one being in rock and contaminated by the Baquando goats and Baboons that frequented it.

"This is a hunter's paradise. To climb in the early morning to the topmost pinnacle of some hill selected for a wide range of view, to sit in the cool south-west breeze as it streamed inland from the Atlantic, and watch the sun rise over a shoulder of the great mountain, was an unforgettable experience. As the clear white light came slanting across the crests of the hills and began to radiate downwards on the plains, every detail below, becoming illuminated, sprang clearly into view. At this time the game was all on the move, and could be detected with glasses three or four miles away. Below, in the foreground, delicate clean-cut Springbuck, in open herds, moved briskly between the bushes from tuft to tuft of grass, throwing long blue shadows across the cool, pale sand. Beyond, a solitary Gemsbuck, standing motionless as if carved out of stone, would suddenly spring into life, and with characteristic pendulum nodding of the head and smooth, rapid walk, join a herd of his kind already grazing on the edge of a dry water-course. Or the more bulky and indolent forms of a herd of large Mountain Zebra would be grouped in tones of pale grey and pinkish white among the thick bushes clustered about some stony ravine. The sun, meanwhile soaring perceptibly higher above the crests of the lovely purple mass of the mountain, swept back the shadows into the farthest recesses of the landscape, changing the cold blue light of dawn into the sunny brightness of an African morning. . . ."

To the east of the Sable country, described above by Captain Blaine, the country is practically all of a sandy nature which extends to both the northern and southern frontiers. After passing the basin of the Quanza to the east, there is the main watershed of the Congo and Zambezi, which rises at its highest point to nearly 5000 feet. For the first hundred miles the sandy ridges are steep but covered with heavy bush and timber, with dense undergrowth and bracken, which are intersected with open dambos and clear, swift-running crystal streams. This country is practically unpopulated: in it are a few Roan Antelope, Reedbuck, Pig, and Duiker, also Leopard. Farther to the east and south, the thick bush country gives way to the flat open plains of the western drainage of the Zambezi basin. The south-eastern part of Angola, east of the Cubango River, which flows into N'Gami and the Kalahari, is comparatively little known. It is drained by the Lungwe Bunwe, Cuito, and Cuando Rivers which are tributary to the Zambezi. The fauna in these regions is practically the same as that of

Western Barotseland, and Northern Kalahari, from which countries, it is, at present, more accessible.

As regards game in the territory, the following, given in the order that they appear in Rowland Ward's *Big Game Records*, are some of the principal species, together with the localities in which they are to be found, in Angola:

(Those marked * are peculiar to Angola)

<i>Species</i>	<i>Zone or Locality</i>
Hartebeest Lichtenstein	On plains of Zambezi River in south-east. Northern limit, Zambezi-Congo watershed.
Sassaby	On plains of Zambezi River in south-east. Northern limit, Zambezi-Congo water-shed. Heads good average size at northern limits.
Blue Wildebeest	On Zambezi, north to Casai River, and west to Cubango River and Cunene.
Duiker.	Throughout country, with the exception of dry coastal belt.
Duiker, Grimmi	Quanza. In north-east, on Congo tributaries, is one of deep colouring, possibly West African.
Black-Rumped Duiker, Blue-buck (<i>Bocage</i>)	In dense thickets bordering sand rivers of the dry coastal belt.
Yellow-backed Duiker	In wooded kloofs high on western plateau.
Dik Dik* (<i>Rhynchotragus damarensis variati</i>)	Dry coastal belt, northern limit Catumbella River.
Oribi	Plentiful in all parts of high veldt.
Oribi* (<i>Ourebia rutilus</i>)	Quanza and district.
Steinbuck	Coastal belt and near Quanza.
Klipspringer.	Coastal belt, in broken country of middle veldt.
Waterbuck* (<i>C. defassa penricei</i>)	Middle and western high veldt.
Lechwe	High veldt. Cunene, Quanza, and Zambezi waters.
Puku	Zambezi, reputed extreme south-east.
Reedbuck	Middle and high veldt, throughout.
Impala, Black-faced* (<i>Ae. melampus petersi</i>)	Coporollo River, 50 miles in from Lobito.
Springbuck* (<i>Antidorcas angolensis</i>)	Coastal dry belt, from Cunene in south to its northern limit near Benguela.
Sable Antelope (<i>Hippotragus niger</i>)	Plentiful in south-east.

<i>Species</i>	<i>Zone or Locality</i>
Sable Antelope* (<i>Hippotragus niger variati</i>) . . .	Only between Quanza and Luando Rivers, with southern limit Luaco River.
Roan Antelope . . .	Middle and high veldt, throughout.
Roan Antelope* (<i>Equinus cottonei</i>)	Quanza district.
Gemsbuck* Oryx (<i>Gazella blainei</i>) . . .	Coastal dry belt, from Cunene, south to Corporollo River, northern limit.
Bushbuck . . .	Throughout the country.
Situtunga . . .	On waters of Quanza, Cubango, and Zambezi.
Greater Kudu . . .	Common in all parts of dry coastal belt, extending north to near mouth of Quanza. Fair average heads.
Eland . . .	Middle and high veldt, not plentiful.
Buffalo, Black . . .	Coporollo and Cunene Rivers, extending north near coast in middle veldt, to Catumbella and Cubal Rivers. Also on Cutato River further inland near Quanza. Average heads.
Buffalo, West African Bush Cow	Northern Angola, extending south near coast to Novo Redondo, 100 miles north of Lobito.
Hippopotamus . . .	In all larger rivers.
Bush Pig . . .	Throughout. A large species is found east of Quanza River.
Wart-hog . . .	Throughout.
Rhinoceros . . .	On Cunene River. Very few.
Elephant . . .	From Congo in north to Cunene River in south, in places, between coast and foot of main plateau. Ivory as a rule not big.
Giraffe. . .	Cunene River, and south-east.
Lions . . .	Throughout.
Leopard . . .	Throughout.
Cheetah . . .	On plains and open country of high veldt.
Wild Dog . . .	Throughout.
Lynx, Civet, Serval . . .	In parts.
Aardvaark . . .	On plateau.
Aardwolf . . .	On plateau.
Zebra, Burchell . . .	Coastal belt, and common on Gubango, and Zambezi waters.
Zebra* (<i>Equus hartmannæ</i>) . . .	Coastal belt, northern limit, 100 miles north of Mossamedes.
Zebra (<i>Equus penricei</i>)	

Those contemplating a hunting or collecting trip in Angola, should bear in mind that the country is a Portuguese penal settlement. For this reason, passport regulations, and the entry of arms and ammunition are somewhat



Plates 122—123

ANGOLA

Top. A YOUNG GEMSBUCK. GREATEST REPRESENTATIVE OF THE ORYX GROUP. NOTE THE BROAD FACE PATCH, WHICH DISTINGUISHES GEMSBUCK FROM ORYX BEISA.

Bottom. SPRINGBUCK. ALSO ONLY FOUND IN S. AFRICA AND ANGOLA. BOTH ANIMALS ARE REPRESENTATIVES OF THE STILL DWINDLING HERDS WHICH ARE ALL THAT REMAIN OF THE HUGE NUMBERS WHICH ONCE COVERED THE VELD.

more trying and rigorous than in other African states. Also at present, there is not the accommodation that is generally found in some of the more accessible countries which cater for such requirements. After, however, one is established in the country, the difficulties become less, and the officials, and residents generally, will be found most hospitable and helpful.

With the exception of the Zambezi territories to the south-east and parts of the coastal belt, the remainder of the country is easily accessible by car or lorry. The system of well-kept roads, on which only pneumatic-tired cars are allowed, extends all over the colony; they are some of the finest to be found now in Africa. They connect with all the surrounding states: Belgian Congo, Northern Rhodesia, and South-west Africa, and therefore with the remainder of Africa. Apart from hunting or shooting, an interesting month can be spent in the country by anyone who cares to see with the least effort the various types of tropical and sub-tropical Africa.

The following notes may be of use to intending visitors. There are several routes by sea, while from land it is now connected with the whole of the South African railway system through Victoria Falls and Katanga, via the Benguela Railway. There is a mail service from Lisbon by steamer to Lobito, by the Portuguese lines. German steamers from Southampton, as well as occasional Union Castle ships. Belgian and Italian lines are likely to call regularly as the railway now connects with Katanga and Central Africa. Another route would be via Capetown, which is five days' voyage along the coast by either English, Portuguese, or German lines. The voyage from Southampton to Lobito, the terminus of the Benguela Railway, takes from eighteen to twenty days.

All equipment, stores, foodstuffs, and liquors should be taken out in cases ready for safari. Practically all tinned and fresh foods can be obtained in the country, but the former are high in price and of indifferent quality. The Customs duties are somewhat heavy, ranging from 25 per cent. to 50 per cent. *ad valorem*. Whisky and spirits work out at about £6 or £7 duty per case of twelve bottles. Portuguese wines of good quality are obtainable in the country at a comparatively cheap rate.

Should it be necessary to use native carriers on safari, it would be as well to have loads made up not exceeding 60 lbs. each, in the usual Venesta cases. The carrier in Angola carries on the shoulder and not on the head, so a longer and narrower case of the same capacity is preferable, 26 inches by 11 inches by 11 inches instead of the usual 24 inches by 12 inches by 13 inches of the head-carrying countries.

There are three principal ports for landing or making a base in Angola, each of which has a railway to its immediate hinterland. The most northerly is St. Paul da Loanda, the capital of Angola, which has a railway to the interior of some four hundred miles. The most southerly is Mossamedes, which is surrounded by desert, and is connected with the high plateau at Lubango by a light railway of above two hundred miles. Lobito, in the centre, is now the principal port, as well as the terminus of the Benguela Railway, which is now connected with the whole of the South African railway system. It is also connected throughout by motor roads, which make it the best base for expeditions to any part of the interior. Previous to the opening up of the Colony by the present rail and road system, it was necessary to select one of these ports to base on, according to the district required and species sought for.

Along the route of the Benguela Railway there are townships, from which the main roadways radiate to all parts of the country. The two best bases would be Lobito, for the dry belt and coastal areas mentioned above, and Nova Lisboa (Huambo), two hundred and fifty miles inland by car or rail, situated on the western edge of the plateau for all expeditions on the high veldt, and interior generally. There are hotels and stores where fresh foodstuffs are obtainable, and garages in each township. The hotels generally at present are somewhat primitive and sketchy.

The main form of transport in the country, apart from the railways, are motor, ox-wagon, and native carrier, of which the motor is in most general use. If one is touring through to other countries, it would be simpler to take a car out, or to buy one locally. All the large American cars have agencies, and the cost in Angola is, in some cases, less than that of the same car in England.

Cars and lorries of various capacities can be hired locally, which, for those visiting the country only for a short period would be best; the price per kilometre runs from fivepence to eightpence or more, according to the size of the car or lorry and the current price of petrol. Petrol is obtainable throughout the country, but varies in price according to the distance of transport from the coast.

For extended trips, where time is no object and cross country work is intended, the ox-wagon is the best means of conveyance, especially if a bulk of heads and skins are to be collected, and carried about. The hire of a wagon, with a full span of oxen, native driver, leader, etc., is about £1 per day.

In those countries and districts where there are no roads for either motor or wagon, and for general mobility, the native carrier is the best solution. Native carriers in Angola are, on the whole, a good class, and carry a good load; fifteen miles a day is the average day's journey, but the better ones will do more. The regulation load is from 50 to 60 lbs., but by the time they have attached all their own junk as well it at times amounts to some 80 lbs. The cost of a native carrier varies with the district, but, on an average, this will work out, with food, from sixpence to about eightpence per day; native foodstuff is obtainable practically everywhere.

Native servants of average efficiency and intelligence are available, and cost, without food, about £1 per month—cooks from 30s. to £2 per month. The official language of the servants of the country is Portuguese, but some are obtainable who speak English. The Portuguese currency is the escudo.

Trained gun-bearers, such as those to be found in East Africa and Rhodesia, do not exist, although there are a number of natives who are keen, steady, and can follow a spoor.

The entry of guns and ammunition into the country, will, as mentioned previously, entail more formalities than in other African territories. Only one rifle of each calibre is allowed per head, and only one hundred ball cartridges to each rifle. One double-barrelled shotgun, also, of each calibre, is allowed, with two hundred and fifty round of shot cartridges to each gun. It usually takes several days to complete the various formalities on the import of arms. The weapons have to be sent through the Customs to the armoury at Benguela, twenty miles away, to be stamped and registered.

As regards shooting-licences, information in detail can be obtained at the Department of Overseas Trade Shipping and Transport Section, 73 Basinghall Street, E.C. 2. The following is an extract from that source:

COLONY OF ANGOLA—PROTECTION OF BIG GAME

A new game law was published on 30th November 1929, copy of which can be seen upon application to the Department of Overseas Trade, Shipping and Transport Section, 73 Basinghall Street, E.C. 2.

Lists have again been drawn up of animals which are completely protected, though they can be shot for Museum purposes, these include in particular the Giant Sable Antelope, Giraffe, Rhinoceros, and Zebra; a second list contains animals considered harmful which can be shot at any time; a third list specifies the animals which can be shot on an ordinary licence; a fourth list those which can be shot only on a special licence.

Only male Elephants may be shot whose tusks weigh not less than five kilogrammes. The licence for two Elephants costs about £15—and about £10 for every licence to shoot one above this number.

Licences are cheaper for Portuguese subjects and for foreigners of three years' standing than for visitors to the Colony. "Sporting" licences, which include permission to shoot one Elephant cost about £25 and £50 for the two classes respectively. A complete list of the various licences will be found in Article 23.

Licences are valid for the whole Colony. It is left to the Governor of each district to decide the close season and the number of the animals to be shot under a licence. For the Loanda district this has been already fixed as from 1st December to the 1st August of each year.

The use of searchlights off the roads is prohibited (Article 38). Females accompanied by their young and immature animals may not be shot (Article 41). A fine is imposed if a hunter shoots more than he can utilize immediately (Article 42).

Giant Sable.—Licences to shoot this species can only be obtained for genuine Museum purposes.

The above information was remitted by His Majesty's Consul-General at Loanda. . . .

The extent of sport in the country has not, so far, called into being the "white hunter," as known in East Africa, but there are one or two capable men who have at various times accompanied expeditions in the past. Messrs. Rowland Ward will probably know of some good man.

From 1898, with the exception of the War period, I have been resident on my lawful occasions, at one time or another, in the chain of countries south of the Equator from the Indian to the Atlantic Oceans. The day's work at the time took me to the various countries, which were mostly in the early stages of their development, so there was a fair chance of seeing them open up. In comparison, Angola, although it had not the vast herds of game that were occasionally encountered in the other countries before they were occupied as they are now, nevertheless had an interest of its own in its variety of types of country and the possibility of new species. Furthermore, it is still really very little known as it has not had the attraction for the tourist-hunter in search of big game, and remains



Plates 124-127

ANGOLA

Top Left. GIANT SABLE. ONLY FOUND IN ANGOLA AND STRICTLY PRESERVED. HORNS RUN TO 64".

Top Right. HARTMAN'S ZEBRA. FROM THE COASTAL BELT OF ANGOLA.

Bottom Left. ANGOLA BUFFALO.

Bottom Right. ILLUSTRATION AND COMPARISON IN HEADS OF THE GIANT AND TYPICAL SABLE ANTELOPE.

offence. Lions have been reported in the country in recent years, as well as Wild Dogs—that curse of African game—and these have taken a certain amount of toll.

When the late Captain Vanderbyl and Captain Gilbert Blaine made their visit to Angola they formed a base at Nova Lisboa (Huambo) and then proceeded to the Sable country, which was then 150 miles from railhead, for the purpose of study and collecting specimens.

Before the rains started in September, and about a month after they had started, as I still had some reconnaissance work to do for the Benguela Railway, opportunity was taken to do this work and, if possible at the same time, to redeem the promise to the British Museum of a complete specimen of the new Sable. As I was not far from where Vanderbyl and Blaine should have been, I decided to visit them. *En route* for their camp it was gathered from the natives that, although they had been some time in the country, so far they had had no luck, as they were on the Quanza side of the country, which was the wrong one. Vanderbyl was unfortunately found to be laid up, and therefore had to leave the country without getting a specimen. Blaine arrived late in the evening of my arrival with his first specimen.

After spending a day with them, a move was made to some twelve miles to the south, where spoor had been seen on the way up, and preparations made for the hunt. On the first day's hunting a herd with a good bull and eight cows was found, and kept under observation for some time, but, with the hope of finding others to examine first, no shooting was done then. The two following days were blank, after hunting from dawn to dark, which was very disheartening, as only one day remained for the chase.

The natives of this sparsely populated country, the Luimbe, are a poor lot. They are principally beekeepers, so that every tree of any size holds one of their hives. The Sable seem accustomed to seeing them about the bush and apparently have no fear of them. For assistance in the hunt a likely-looking local native, who volunteered to show where the Sable were to be found, was taken on. After wandering about with him in an aimless fashion for several hours, it dawned on me that he was taking a walk for his own purposes of hive inspection and not Sable hunting. This turned out to be correct, so he was dismissed, but much valuable time had been lost.

On the last day a start was made at dawn, and, after a couple of hours' hunting the fresh spoor of a large bull was found where he had evidently been feeding on the edge of the bush. At that very dry time of the year, when the ground is so hard, it is difficult to distinguish Sable from Roan, so there was a doubt about it. Anyway, the spoor was followed to where it joined the herd, as the bulls usually do in the morning, before the united herd start wandering along until midday. Then there was no more doubt. At that time of the year the bush is in full leaf, and very blind before the rains begin. It is difficult to see at all in the thicker bush where these animals live. Added to this is the torment of the "mopani" bees, which, in countless numbers, get into one's eyes, nose and ears; these are more numerous as one approaches the game.

About ten o'clock a bad patch of bush was struck, with the wind all wrong, so a cast was made forward in more open country. Near the

end of the cast there was apparently no sign of the herd, and, as one native expressed it, "they have flown up into the air," so it certainly seemed. Unfortunately, they were just then close by in a dense patch, and took the wind, so the chase continued until one o'clock, when they were found resting in more open bush.

The first glimpse of the black form of the bull, who was still standing up on the far side of the herd, could be seen through the trees, and the horns of the herd lying down. One young bull was standing as sentry on the side of an ant-heap, which then formed the only cover for an approach, with the wind as it was.

As the bull seemed a fine one, and it was also my last opportunity for some time, I was rather over keen and anxious. The subsequent lone, circuitous crawl on bare knees, through burnt stubble, added to the heat of an approaching storm and the "mopani" bees, made this hunt, even after many years, a memorable one. Incidents, too, seemed to occur, that did not do so at other less anxious times. One of these, which had never happened before under such circumstances, was one that shook me up a bit. Owing to the bees I had to keep my eyes closed for most of the time, opening them occasionally to take bearings. On one of these occasions there was seen to be rather a nasty-looking brown mass immediately in the path ahead, only a couple of yards away. It was lucky that bearings were then necessary, as it proved to be a Puff-adder unlimbering and beginning to take notice, so this necessitated a side crawl with as little sudden movement as possible, although at the time suddenness seemed advisable. However, the crawl, accompanied with deep prayer, was continued, and the unoccupied side of the ant-heap was reached at last; a few minutes' complete rest then seemed indicated, with the pious hope that the young sentry bull on the other side would stay where he was.

The next thing was to get one's head up to examine the possibilities, and incidentally the bull himself. Bareheaded, I gradually got to the top of the ant-heap and obtained a clear view over it, as well as over the rump of the sentry.

The herd bull, as black as jet, and a magnificent sight, was standing up, side on, rubbing his huge horns against a tree trunk, about one hundred yards away. The next effort was to remove some of the eye bees, which had made the most of their time during my protracted sighting, and then to get the rifle into position over the ant-heap, without disturbing the sentry, who must have been dozing. The rifle, a double-barrelled .400/.360, was pushed forward slowly into position, but unfortunately it was impossible to avoid resting part of the barrel on the ant-heap—a fatal thing under any circumstances with a high-power weapon—but I did not care to move it further, and had to take the chance. A fair, clear sight was made, but on pressing the trigger, the rifle, as was almost inevitable when fired resting on anything so solid, threw up, and the bullet struck high. It was subsequently found to have hit too high in the shoulder. The bull went down with all four feet spread out, but recovered himself immediately and made off. The young sentry-bull, over whose back the shot was fired, reared up as if he too had been hit, and then moved off with the remainder of the disturbed herd.

After that followed another long chase after the bull, who had evidently been hard hit—as he had turned out of the herd—and went away down

wind. The blood spoor ceased after a time, but it seemed that he was weakening, and was viewed through the distant bush at times without the chance of a shot; he lay down several times and was keenly alert. Eventually, after several hours, when it was nearly dark, he was approached when lying down, and finished. The storm that had been threatening then commenced, but the head, with the whole body-skin complete had to be got off that night at all costs. We skinned the body, leaving the head with it, to be carried to camp, where the head itself could be carefully removed in a better light.

The head, with flesh and horns, is in itself a heavy burden, but, with a wet skin attached, it made a very awkward load, more especially at night going through bush. There were only two natives and myself to carry it, but camp was reached late in the evening. We had been away from it for fifteen hours of hard going, but the results were worth it. The animal we secured now stands in the British Museum of Natural History at South Kensington.

PART FIFTEEN

FRENCH EQUATORIAL AFRICA

CHAPTER ONE

GENERAL

By MAJOR P. H. G. POWELL-COTTON

FOR the naturalist or sportsman with more time than money at his disposal, this wide area, extending from the desert to the primeval forests of equatorial Africa, offers many advantages over British colonies.

The Chad Military Territory.—The quickest way to reach the desert regions to the north-east of the lake lies:

Through Nigeria to Kano	2 days
Motor car to the frontier at Ngala	4 days
Pack bullock to Kousseri	5 days
Steel boat down the Chari and across Lake Chad to Fort Bol	10 days
(or possibly by motor launch)	4 days
Pack bullock to Mau	5 days
Camels from there into the desert.	

With average luck one should reach the Oryx country in six or seven weeks from London, and in three weeks on the ground secure good heads of:

	<i>Local Name</i>
Addax	Bru-sela
White Oryx	Warsh
Dama Gazelle	Ariel
Dorcas	—
Striped Hyena	Kar-Ren
Jackal	—
Fennic Fox	—
Lion (maybe)	Tobo

The hot season in the desert commences early in March, after which the animals come farther south, but travelling then is much less agreeable. Near the mouth of the Chari River, on the way, Lion, Buffalo, Waterbuck and Kob may be found.

A servant who can speak Arabic and some language the sportsman

knows, should be taken from Kano. Any others should be engaged at Fort Lamy, and a cook, tent boy and gun-bearer-headman should be sufficient.

Southwards through Chad to Fort Archambault in Ugangui-chari.—If the sportsman can prolong his trip, arrangements may be made to send his desert trophies from Mau direct by camel to Kano while he continues his journey into the open, orchard-like country southwards to Fort Archambault, on the way to which he should have a chance of:

	<i>Local Name</i>
Elephant	Fil, or Joko
Rhino	Ab-Gur
Hippo	—
Giraffe	Kolo
Derby Eland	Bugar
Chad Buffalo	Jam-ouse
Greater Kudu	Nyale
Lion	Tobu
Leopard	Mackor, or Ze
Cheetah	Guetta Nimureya
Serval	—
Waterbuck	Catemburo
Hartebeest	Ad-drack
Tiang	—
Roan —	Arbur-ruf
Kob —	Hamroi
Bushbuck	Tubakas
Reedbuck	Um-subah
Oribi	Um-subah
Duiker	Dule
Red-fronted Gazelle	—
Wart-hog	Al-loof
Spotted Hyena	Marfine
Wild Dog	—
Jackal	—

Motor transport connects Fort Archambault to Bangui, the capital of Ubangui-chari, and from there one can travel by steamer to Brazzaville and so home. This round trip has been done for about £500.

The Cameroons.—Should it be desired to add to the bag the animals of the tropical forest and swamps of the Cameroons, there is a motor route from Bangui across that country, with a good chance of securing the following:

	<i>Local Name</i>
Elephant	N'Jock
Bongo	Bongo
Situtunga	N'Vuey
Forest Buffalo	N'Yart
Forest Hog	N'Gark
Bush Pig	N'Goie
Yellow-backed Duiker	N'Zip

	<i>Local Name</i>
Bates' Pygmy Antelope	Ojuey
Bushbuck	N'Knock
Tiger Cat	Bih
Leopard	N'Ja
Gorilla	N'Ge
Tchego	N'Kili
Chimpanzee	War
Mandrill	N'Sombe (near the coast)
Forest Duiker, White Belly	O'Lar
Forest Duiker, Bay	So
Forest Duiker, Blue	O'Quong
Forest Duiker, Peters	Ac-quar-her

and many of the rarer Monkeys, such as the Black and Red Colobus.

Customs.—The Nigerian authorities charge no Customs on camp kit, rifles, cartridges, stores, etc., if *bona fide* personal baggage and accompanying an individual in transit through Nigeria. Should it be intended to use any dutiable stores while *en route* they must be declared and duty paid on them. There is a transit fee of one shilling for each firearm, and one shilling per one hundred cartridges.

The French Customs collected at Fort Lamy will carry one through Chad, Ubangui-Chari and the Moyen Congo. The stipulated 12 per cent. on the declared value of tents, rifles, etc., is either waived or is returned on leaving the country.

The Cameroons, as a Mandatory Territory, claim a separate Customs Duty, but probably there would be a refund on such things as rifles and camp kit when exported.

Rifles and Ammunition.—There is no difficulty in importing a moderate battery, such as one heavy rifle, a small bore, a shotgun and a rook rifle, with an adequate supply of cartridges for each. A small-bore magazine rifle and a ball and shotgun would be ample for a desert shoot, but if the intention be to try for other game, a heavier bore would probably be needed, and a rook rifle is very useful to bag birds for the pot, as it makes less noise than a shotgun, and six of its cartridges are equal in weight to one for a twelve-bore shotgun.

Permits.—Any special permission should be obtained from the French Colonial Office, through our Ambassador in Paris, and the applicant should give a full description of the rifles it is proposed to take, with the number of cartridges for each.

A request to the officer in command at Mau, that camels and a guide may be ready by the date the sportsman expects to arrive there, may save the seven to ten days necessary to get them to the post.

Game Regulations.—In the new rules just issued, a three-thousand francs licence allows:

4 Elephant	4 Bongo
4 Hippo	4 Situtunga
1 Black Rhino	3 Mouflons
15 Buffalo	3 Colobus
1 Giraffe	4 Otter Shrew (<i>Potanagale velox</i>)

1 Gorilla
4 Greater Kudu

2 Ostriches

The following are totally prohibited:

White Rhinoceros
Derby Eland
Chimpanzee
Water Chevrotain

Wild Ass
Ant Bear
Pangolins
Mantee

Young animals, or females when accompanied by them, should be spared, while no more than two Antelopes or Gazelle of the same species may be bagged on the same day.

A female Elephant counts as two males, and tusks under five kilos are forfeited.

There are no restrictions on animals not mentioned above.

Alternative Routes.—There are several practicable alternatives, of which I will mention two.

(1) To reverse the procedure and begin the trip in the Moyen Congo from Brazzaville (where servants must be engaged) continue up the Sanaga or Likuola Rivers and find one's way home either via the Cameroons to Duala, or northwards by the new motor route and across Nigeria. The bush country of the Northern Cameroons should offer a similar list of game to the region between the desert and Fort Archambault, with the exceptions of Greater Kudu and Rhino. An extension of this route could be made for the desert animals beyond Lake Chad.

(2) A short but interesting trip could be taken to the equatorial forest of the Cameroons, from the Port of Duala by rail to Yaounde, the seat of Government, where servants should be obtained. Good motor roads from here lead to within easy reach of game and a very fair bag may even be made from the roads themselves.

FRENCH EQUATORIAL AFRICA (Continued)

CHAPTER TWO

THE GIANT FOREST HOG

Hylochoerus meinertzhogeni rimator. Native Names: "N'gombo" (French Congo)
"Ekak" (Cameroons)

By MAJOR P. G. H. POWELL-COTTON

THE Forest Hog, or, as it is frequently named, the Giant Pig, is a great black beast which haunts the equatorial bush, from the Cameroons across Africa to Kenya. It is found in close undergrowth such as that frequented by Gorilla.

It is much rarer than the Bush Pig, and, like the Bongo, does not roam widely, but remains faithful to certain localities.

The country where, for the first time, I encountered it, was not far from the camp in an old shooting post of a French Congo official. The district was attractive both for its beauty and the variety of its game.

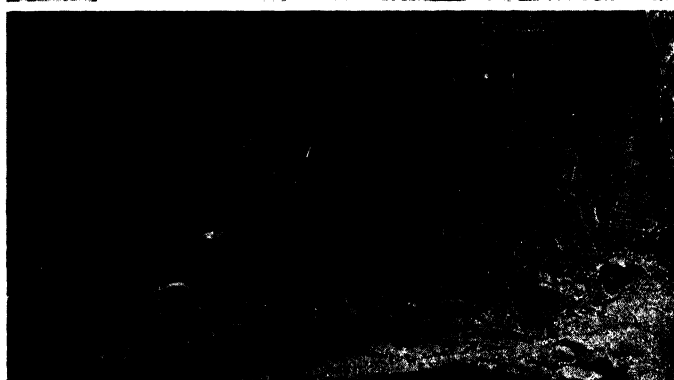
My tent might have been pitched on the edge of an old home orchard, so like was the scene, and close by a clear stream made its way through a salt marsh to the bed of a river, whose banks were dense with jungle. The one drawback to this fine hunting ground was the inevitable wading in mud and water, but this disadvantage was far outweighed by a game list that included Elephant, Hippo, Lion, Leopard, Bongo, Situtunga, Forest Buffalo, Giant Forest Hog, Bush Pig, Bushbuck, Hyena, Tschoga, and various Monkeys.

From the natives of the district I gleaned some details of the habits of the Forest Hog which may be of interest. If the male sees a sow wounded, or is hit himself, he can be counted upon to make a determined attack, and once he succeeds in knocking a man down, not even a cutlass will induce him to leave his victim.

When the female is about to farrow, she and the male cut down a quantity of grass to prepare a large bed, into which she creeps while he continues to pile it over her. It is easy for hunters to find these beds and shoot the female, but they know they will have to reckon with an enraged male who guards the spot with vigilance. He is held in even greater respect than Buffalo by the natives.

It is interesting to notice the survival of wild instinct in the domestic sow, who will make herself a bed to crawl into before having her litter, if she can find anything suitable.

On a later trip in the Cameroons I myself had proof of the watchful care of a boar when we chanced on the spot where a sounder had fed,



Plates 128—130

THE CAMEROONS

Top. YELLOW BACKED DUIKER.

Centre. BLACK FOREST HOG.

Bottom. FOREST BUFFALO.

and, after forty minutes' tracking, found the male on guard over two females who were lying down.

In the French Congo, one morning, the guide and I left camp before dawn and were moving as silently as possible through mud and slush to the belt of boggy timber on the river. I had already, at the same place, shot Bongo and seen Situtunga spoor, when the native tracker suddenly slackened and pointed to a misty black mass about thirty yards away. It was still too dark to distinguish its form with any certainty, but, as I fired, the beast dashed forward and we hastened on its trail.

The day was breaking rapidly, and, when we came on the animal again its muzzle and part of its body were dimly visible behind some tree trunks, making a poor target, but one which I dared not shirk for fear of losing my chance by a sudden bolt into the jungle. Again the Hog broke away and again we followed as quickly as the deepening mud would permit, but before long the native pulled up grimly and explained by signs that no further would he go: any step might plunge us over our heads or cleave us fast to the clayey bottom.

It was with reluctance that the trail was abandoned, but we were to hear of our beast again.

As the moon was rising the following night the natives and I slowly waded out towards a platform we had built away over the raw, misty marsh. Overhead innumerable bats flitted to and fro after the insects that infested the night air, and their plaintive cries mingled with the squelching of our footsteps.

At the platform we deposited our food and water before pushing on again in the direction of the river, where a mighty sound of splashing told of elephants moving away. Then the great grey forms of a couple of females loomed up through the haze on the banks of the stream, and were still standing motionless and unsuspecting as we turned back to the platform.

Close watch there for an hour and a half revealed no sign of life, so, after a breakfast of hot tea and cold liver we decided to try our luck towards the place where I had fired at the Forest Hog on the previous day. Elephants could be heard in the river, and presently we were favoured with a rather unusual sight after dawn—four of them, a bull and three cows, were enjoying their bath about sixty yards from the bank. The bull seemed to crumple up at once as my .256 solid bullet pierced the right side of the head, and he slowly sank down where he stood, while the cows landed close to us, unconscious of the nearness of their danger.

When we reached the morass of mud which had baffled us the day before, we found our Forest Hog—a female—had tried to skirt it and its carcass lay only a short distance away. A bullet, maybe my first, had struck its right haunch and raked forward. Hyenas had worried it, but left the head undamaged, luckily for me, as, in spite of several other efforts to get this Giant Hog, it was not until almost the end of a subsequent trip that I managed to secure a second specimen.

One time in the Cameroons we had pitched camp in a village some eighty kilometres from Yaounde. Red Bush Pig, named by the natives N'Goie, were plentiful, and there were also a few Black Hog. From the hoof marks in the soft muddy earth it was almost impossible to distinguish one from the other, but if, in an abandoned plantation there were indica-

tions that the beasts had fed on the leaves of *Dioscorea*, a species of yam, it told at once of Black Hog, for the Red Pig never touch them.

Early one morning I started out in search of Forest Duiker with a native hunter and Abung Illubei, whose name was well known in the district, as the recognized expert at the "call" which draws the Duiker from its cover. Before long we found tracks of Pig, and, close by, a patch of plantation where they had played mad havoc with the crops and rooted up masses of the yams. Here also they had evidently spent the night, three of them together.

The track led us into a tunnel through the thick foliage of a plant rather like a giant arum lily, 9 to 12 feet in height, under the shelter of which one finds cool twilight even at midday. Progress was on hands and knees, pushing the rifle in front and listening intently, for sound was more dependable than sight. Suddenly, at a chorus of grunts, followed by a scramble, I threw myself back into a sitting position with the Paradox ready, but the beasts crashed away from us, to the obvious relief of the men. I, on the other hand, would have been glad to bring them to bay, for it looked as if we were to add another day of futile crawling to our already long list of blanks. These Hog seem to be one of the most difficult of the forest animals to stalk, for they can travel a great distance in a single night. They go under bush so thick that time and again they hear one and clear right away.

Half an hour's rest and we were off again, creeping still more warily. Twice in two hours we heard the beasts, but could not catch a glimpse of them. Then suddenly I turned at a touch on my ankle to see Imbie Imcocea, my hunter, pointing to the left behind me. With a grip on the Paradox I dragged myself back, turned painfully among the forest of giant stalks and made out a black lump—beast or stump? It was a beast that spun round as my gun rang out, and it rolled over, legs uppermost, kicked convulsively for a second and fell on its side, motionless. A cautious approach of ten yards brought us to a Forest Hog boar, stone dead, shot through the neck. The bullet, in its flight, had cut through a stalk seven-eighths of an inch in diameter, and several smaller ones. At the sound of our coming the beast had doubled back along a parallel tunnel, and stood trying to locate us when I fired.

It was a good average specimen, but 10 lbs. less in weight than another adult male West African Forest Hog that I once handled which stood 32 inches at the shoulder and weighed clean 299½ lbs. The Kenya variety is said to be an even heavier animal. In addition to its much greater bulk, its long black hair, its pronounced cheek ridge and large, flesh-coloured fungus-like growth between ear and nasal bones below each eye, distinguish it clearly from the Red Bush Pig. An adult male of the latter will measure 28 inches at the shoulder and weighs clean some 150 lbs.

FRENCH EQUATORIAL AFRICA (Continued)

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CHAPTER THREE

SITUTUNGA

By MAJOR H. C. POWELL-COTTON

ONCE, on a homeward journey from Lake Chad, through the Congo, I heard there was Situtunga at the mouth of the River Likouala, near Mossaka, the chief trading station of the Trechot Concession, in the Kouyou area.

A year later, by the courtesy of M. Trechot himself, one of his river steamers from Brazzaville brought my men and myself to the place, but the inhabitants advised us to steam on a few hours up the Likouala River to find the "Marbuli," as the natives name the Situtunga.

Batondo, where we were put ashore, was an unattractive spot, a wood station on a mud bank above the marsh, which barely accommodated a small rest hut and a tent, and here we spent weary days beset by mosquitoes when we were not wading through mud of varying depths in a vain search of game. Buffalo I shot, and a Red Colobus Monkey (*Colobus piliocobus bouvieri*) not previously known north of the Congo, but of Situtunga the swampy land showed no sign of spoor. The natives, meanwhile, assured us the beasts had been there in numbers, but had now moved two days further upstream, where whole herds were surely awaiting us, and at last we had the luck to hail a passing steamer for the trading station of Loboko.

Here dug-outs were hired for a further cruise up the Kouyou River, whose banks were fringed with tall reeds to the exclusion of all other view. The monotony, however, soon gave place to the beauty of the forest country, where strong lights and shadows flecked the gleaming water, overhung by trees and vivid, trailing creepers, guarded austere by an occasional palm, or brightened by a tree with copper-coloured foliage. Monkeys chattered in the branches, while the warning screams of parrots or the whirring of ducks' wings heralded our advance, and mingled with the soft pulsation of the water on the dug-out's nose. Once or twice a snake dropped with a thud from an overhanging branch into the canoe, to create a momentary panic among the paddlers, until the unwelcome guest was beaten on the head and thrown overboard.

At the end of a backwater off the main stream we drew up at Pakama, a little settlement of three of the curious Kouyou pent-shaped huts, built of palm ribs, higher at the back than the front, and very thickly thatched with grass almost to the earth. The door of these neat dwellings has no threshold, but is merely an opening some 2 feet 6 inches from the ground, into which the family has to climb as through a window.

Fruitless plunging through the slush around this settlement, and in two

subsequent river-camps on the Kouyou, with weary waits for transport, filled seven monotonous weeks.

We slid down the slimy banks and splashed through the muddy water of the numerous natural courses that intersected the emerald-green pasture of the fenland. As noiselessly as the gurgling morass would permit, we skirted clumps of high reeds, while one man forced his way through them in the hope of disturbing a Situtunga at its siesta, for in these thickets the beasts lie up in the daytime.

It was the middle of the rainy season. The morning air was always chill, the swamps veiled in thick, dark, low-lying mist, through which the sun rose like a cold moon and slowly dispersed it, until about nine o'clock the air grew hot and steamy under a deep blue sky.

Buffalo were plentiful almost everywhere; there were some Red Pig, many varieties of Monkey, and Duck for the pot, but Situtunga tracks, fresh or old, were nowhere to be found.

The evening stillness of the marshes was broken by flights of wildfowl winging their way to roost like phantom birds in the fog; then the bull frogs began an intermittent but lusty chorus in crescendo. When night fell the Situtunga stole out to feed, and retired again to the reed beds in the early morning, so that it was necessary for the hunter to be on the ground as soon as he could distinguish the rifle sights.

Our fourth Kouyou camp at Ekoia was to bring us better fortune. At 5.30 a.m. on a damp February morning, just as day was breaking, the men and I set out across the sodden grass towards a little clump of trees, hardly distinguishable through the white mist that a slight breeze blew in filmy wisps about us.

In less than twenty minutes we picked up the fresh spoor of a Situtunga buck and, in a few whispered words, arranged that while the headman and I would swing round to our left rear, the local hunter should take up the trail. He carried out his part well, for, after a quarter of an hour's squelching through mire, we saw the buck galloping towards us, throwing up a spray of slush as he came.

I crouched down and had seized the rifle just as he sank from sight into a water hole, but next moment he scrambled up on our side, swerved sharply to the left as I fired, and rolled down the bank into the water. We ran forward, to find rather a smaller-bodied animal than I expected, brown instead of grey, with a fine shaggy coat, and the characteristically long, pointed hoofs.

It was just under an hour since we left camp, and, with scarcely an effort, the Situtunga was secured at last, after weeks of hard and disheartening work with no result. He proved a good specimen of the West African Situtunga, 38 inches at the shoulders, and weighing clean 158 lbs. The horns measured along the front curve $24\frac{3}{4}$ inches. This red-letter day was crowned for me by the arrival of the first news from home for four months.

Still further up the Kouyou at the trading post of Linnegue, the white men told me of a village only a day's march distant, where Situtunga were said to be numerous.

It was a wet but interesting trek, along a path which either followed a stream-bed or ran along battered causeways built above the swamps.

At the village the headman confirmed that "Ogongo" (Situtunga) were



Plates 131—134

FRENCH EQUATORIAL AFRICA

Top Left. ADDAX IN LAKE CHAD DISTRICT. ONE OF THE GREAT PRIZES, AS IT IS ONLY FOUND IN THE DESERT COUNTRY MILES FROM WATER.

Top Right. WHITE ORYX IN LAKE CHAD DISTRICT. NOT QUITE SO INACCESSIBLE AS ADDAX.

Bottom Left. SITUTUNGA IN THE FRENCH CONGO.

Bottom Right. WESTERN KOB. UBANGI-SHARI DISTRICT.

indeed close by, and daybreak next day saw us set out in search, through a patch of dripping woodland, with a long narrow marsh beyond.

Here laborious wading was rewarded by fresh tracks, and presently a reddish adult doe, very different in colour from the male, came into sight, feeding quietly on the lush grass. She made an easy target, and we found she was a fine specimen, with long bright chestnut-yellow coat, well-defined white stripes and spots, and hoofs like the male.

For the next three days it rained almost incessantly, while we drearily pushed through the ever-deepening mud, with an equally deepening desire to quit the neighbourhood. The flooding of my hut added the decisive inducement to pack up.

For the information of those who seek for curios as well as game, I may add that at this village I succeeded with some difficulty in buying a series of Kouyou fetish heads in wood, of natural size, carved and brilliantly painted with a good deal of skill. Some are crowned with a beast, such as a Crocodile or Elephant, others have an elaborate coiffure, and all a complete and prominent dental set. As I had been assured that it was impossible to secure a genuine collection of these heads, I did not demur at the demand for four times the usual price of those carved specially for the European traveller.

FRENCH EQUATORIAL AFRICA (Continued)

CHAPTER FOUR

GIANT ELAND

By R. AKROYD

I T was after receiving a letter from Major P. H. G. Powell-Cotton that I decided to make an expedition into French Equatorial Africa, for the purpose of collecting specimens of the Addax and the White Oryx north of Lake Chad. Permission to hunt was obtained from the French Colonial Office through the British Embassy in Paris (these being the proper channels), and, having been successful in my quest to the north of Lake Chad, I resolved to make my way southward, and try my luck in hunting Lord Derby's Eland.

There are two ways of entering the country which is the habitat of this animal—one through Nigeria, the other via the Congo. I chose the Nigerian, as I was making for Lake Chad, but the Congo route is the easier and more accessible.

Leaving Antwerp in one of the Maritime du Congo Belge boats, which are most comfortable, Matadi is reached in, approximately, fifteen days. Thence by train to Kinchasa occupies a day and a night. Crossing to Brazzaville, you take a steamer which makes the journey up the river to Bangui in ten days. From Bangui to Batangafo is a two days' run by motor mail; and at Batangafo you take porters for a five days' march to Borkoru, where you are right in the territory of the Giant Eland. Borkoru is on the Nana Bahia River, a tributary of the Bahr Sea, which flows into the Shari.

Before starting up country, it is advisable to call upon the principal French local authorities. They will have been previously advised of your coming, from Paris, and will very kindly give any assistance possible, and wire ahead for you, as may be desirable.

For an advance base my choice would be Fort Archambault if I were coming from the north and had been hunting other game *en route*; but for those who make a special trip after Giant Eland I should advise Batangafo. The country is flat and undulating, with thickish bush and occasional open "dambos" and, the soil being sandy, tracking is easy.

A word regarding the climate will scarcely be out of place, for the climate is always with us, wherever the sport may be! In this region, lying north of the Equator, the seasons correspond to those at home, but it is hot here throughout the year, the altitudes being from 1200 to 2000 feet, and the general temperature similar to that of the Sudan. Of course, it is a little cooler when the rains are on.

The climatic conditions in Africa, however, are never the same year



Plates 135—137

FRENCH EQUATORIAL AFRICA

Top Left. GIRAFFE. FRENCH CONGO.

Top Right. GIANT ELAND. KONE HILLS, S. OF GAROUA, FRENCH CAMEROONS.
ONE OF THE PARTICULAR PRIZES, RARE AND LOCAL, ALSO FOUND IN
SUDAN.

Bottom. BONGO IN SIERRA LEONE. THE PRIZE OF A TWO MONTHS' HUNT, WHICH
PROVES THEIR ELUSIVENESS.

after year; and if the question were asked: What is the best time for hunting in the Giant Eland country? I should answer that it is optional. In the dry season one can get all over the country by car, and in the wet season with porters. I myself hunted north of Fort Archambault in May, when the country was dry, and at Borkoru in the middle of June, during the rains, when the tracking was easy and the grass knee-high. Though thunderstorms occurred every day there was no inconvenience, and several times during that month I had two or three days running without rain.

Borkoru is eight days' march by porters from Fort Archambault via Moisalla, which is the headquarters of the Administrateur of that district. After leaving the great rain forest at Bangui, the country becomes very hilly, deep valleys with rapid streams alternating with strips of forest and cultivated ground, and small rubber plantations. Then, as you go further north, the country over the divide becomes gradually flatter, assuming the undulating character already mentioned.

Besides the two means of transport to which I have referred—cars and porters—there is yet another method for those who have time for it, viz., by boats from Batangafo or Fort Archambault to Moisalla—steel boats with thatched-in roofs, poled by eight natives, and called *ballinières*. When I was there all officers, officials, etc., adopted this means of transport between Fort Lamy and Fort Archambault, when going home on leave, or returning. The distance is about four hundred miles between the two places, and those who could not afford a car continued by boat to Batangafo.

The native porters in this part of the country work from village to village. That is the custom, and, as a result, it sometimes happens that one has to change porters twice in a day. It is also customary for the chief of the village to provide food for the porters at the end of each march.

Rest houses are met with along all the routes, but it is advisable to take a tent. Even in a "rest house" one may have adventures. I had the somewhat disturbing experience of a snake dropping upon me from the roof while I was in bed. Luckily, there were no ill effects: the fright was mutual, and the reptile made a hurried exit, to which I did not offer any opposition!

For all rest houses, and for such necessities as eggs and chickens, there is a fixed tariff of charges. As regards local stores, the Compagnie Onahama de la Nana has establishments, both at Archambault and at Batangafo, the latter being the best place for those coming from the north. A good supply of provisions—in fact, everything required—should be taken. There was no store of importance at Fort Lamy when I was there.

The natives of these parts are called "Sara." They are all keen hunters, good trackers, and, naturally, fond of meat. In each village there is usually one good hunter who knows where the game is to be found.

Turning now to the habits of the Giant Eland (*Taurotragus derbianus congolamus*), it may be said that they range from just south of Latitude 10 degrees N. to the Belgian Congo—exactly how far south I cannot say. I heard that they were found on the borders of Nigeria. They are extremely shy, have keen eyesight, and their scenting power is very good. If suddenly disturbed, they will make off at a great pace at first, jumping over bushes in every direction, and then settling down to a long, steady

trot, which will carry them on for several hours. After that they can be depended upon to keep a sharp look out, and, on approaching them a second time in one day, the utmost caution is necessary. Disturb them again, and off they go—this time, for good. But it is indeed more likely you will not be able to approach them the second time at all. They will probably “spot” you in the bush before you have time to see them—and your chance is gone for that occasion.

It seems to be more difficult to get up to them in the wet season, when there is plenty of water about, than in the dry, when they have to travel between certain water holes. At least, that was my experience; but I should say that where they are not often disturbed or shot at, they are much less shy. I found this to be so at Borkoru, where the natives reported having frequently seen them when out collecting honey.

On my way south from Fort Lamy to Fort Archambault, in my *ballinière*, I came to a village called Alisso, about ten miles south of Latitude 10 degrees N., and there I decided to go off for a twelve days' hunt towards Logone River, reputed to be a good habitat of big game generally. Accordingly, I sent the boat on to Kouno, telling the crew to await my arrival, and started on 5th May with one shikari, one headman, one native hunter, thirteen porters, and a cook. I took with me one hundred francs in small money. From a local chief I hired a pony, promising him compensation should the animal get badly bitten by tsetse fly. As luck would have it, I did not run into a “fly belt,” and therefore managed to return the pony intact before I reached the worst part of the district. Whether this was better for the chief than the promised compensation in the other event would have been, I know not; but it was undoubtedly better for me—and for the pony!

On 7th May I left Bartlet at 6 a.m., and, an hour later, a Lioness, with cubs, crossed the track on which we were travelling, some little distance ahead of us. We followed up, but failed to locate her, and continued the march. At 9 a.m., as we rode along, two Eland suddenly appeared and crossed the track. I dismounted as speedily as possible, but the first one decamped without standing, so I was unable to see whether it carried a good pair of horns or not. The other stood for a few seconds, and I got in a quick shot, which accounted for a fine female Derby Eland, with horns measuring 36 inches.

This incident was a great surprise to me, as I had no expectation of meeting with Eland so far north, my idea being that I should find them no nearer than Moissalla; but Latitude 10 degrees N. seems to be the northern limit, both for the Sudan and the Congo race.

I hunted in this district for several days, hoping that fortune would vouchsafe me a good bull Eland, and thereby balance the account as between the sexes; but I never came upon any fresh spoor, though I visited a number of water holes which had, in fact, dried up, it being the end of the dry season, and rather late. On this particular hunt I had a water sack carried, while each native of the party had a water bottle.

My second encounter with Derby Eland, on this same expedition, was at Borkoru, nearly two hundred miles farther south. Arriving there on 15th June (at which time it rained once a day, as a rule) I found that the Eland were afflicted with some pest, of which they were dying in considerable numbers. The natives showed me several skins, all of

which exuded some fluid through the pores, and emitted a very strong stench.

On the first day on which I went out I found plenty of spoor close to the village, and natives who were working and collecting honey thereabouts reported Eland frequently in sight. The second day was one of continuous rain, but it cleared up on the third, and I sallied forth at 6 a.m. to take advantage of this improvement. After about two hours' walking I struck the fresh spoor of three bull Eland. One set of tracks being very much deeper than the other two, I knew that the trio included a big one. My hopes of success rose high, and as it turned out, they were not in vain. We followed up the spoor for the best part of an hour, and then discovered that the big bull had turned off by himself, the others going on together. Some very careful tracking on our part here ensued, and ultimately I espied him in the thick bush, within sixty yards of me. The first sight of him satisfied me that I had found what I wanted, a very big bull. It was an easy shot, and, when we measured the horns afterwards, they went to $40\frac{1}{2}$ inches.

The Sara name for the Eland is "bosobo," and this wary, fleet, and very shy Antelope is perhaps the most alluring objective for the big game hunter in the region to which I have been referring. But besides the Derby Eland, there are here to be found many other kinds of game that are well worth attention. Hippo abound in the rivers. Buffalo are very numerous, and are found sometimes in the thick bush, as well as on open "dambos." I once counted a herd of two hundred and fifty of them in this district. Roan Antelope, Hartebeest, Waterbuck, Bushbuck, and many smaller animals are also plentiful.

I may add that, owing to the wet weather, it took me three days to get the head-skin of my big bull Eland dry enough for travelling. I accomplished this by building a shelter for it, consisting of four uprights, thatched with large leaves, and open on all sides to the air. The skin was strung up inside, suspended from the roof, and slightly stretched. In this way it was quite protected from rain and sun, and was eventually brought into a fit state to make the homeward journey.

Thus ended an expedition which was both successful in the attainment of its objects and thoroughly enjoyable as a hunting trip.

APPENDICES

NOTE TO THE READER.—When reading this Appendix reference should be made to the Map which is used as an end-paper to this volume.

APPENDIX ONE

GAME DISTRIBUTION

By MAJOR H. C. MAYDON

ONE of the primary purposes of this book is to encourage big game sportsmen to go for the "star" heads of each district of Africa, and, after that, to seek for the biggest heads of the commoner species.

First of all, what are the districts? That, I hope, we have made clear both from the map and the different chapters. It is not conclusive and it may be open to argument, but it has some system.

Then, what are the "star" heads? Here is the list. The map will make clear some of the places where they may be found, and the chapters will describe a hunt or two and the best methods for their pursuit.

This list has been compiled in consultation with men who have hunted in many districts of Africa, as having a wider vision than the specialist of one district only.

The asterisked heads denote rarities which are also good trophies. Elephant, Buffalo, Rhino, Lion, and Kudu are not rarities but must be included for many reasons.

I had hoped to make it clear as to where particularly big heads of the commoner species might be expected. As enough stress has perhaps not been put on this in each chapter, I have made up a list. Hartebeest, Duikers, Oribi, Dik Diks, Hogs and Felines, with one exception, have been purposely excluded, and all sub-species omitted.

Name of Animal.		Rowland Ward's Record Measurement. Inches.	Best Locality.
*Hunter's Hartebeest	<i>Damaliscus hunteri</i>	27	Kenya.
Waterbuck	<i>Kobus ellipsiprymnus</i>	36½	North Rhodesia, Nyasaland, Zululand.
Waterbuck	<i>Kobus Defassa</i>	39½	Uganda, White Nile.
Lechwe, Red	<i>Ontoreagus leche</i>	34½	North-west Rhodesia.
†Lechwe, Black	<i>O. smithemani</i>	29½	North-east Rhodesia.
†Lechwe, Nile	<i>O. megaceros</i>	34½	White Nile.

* Denotes Rare, a good trophy, and good hunting.

† Denotes Uncommon or Local, nice heads, and very often good hunting.

Any beast may give you a good hunt if you go out for the real monster head, but an attempt has been made to indicate the most uncommon quarry.

Name of Animal.		Rowland Ward's Record Measurement. Inches.	Best Locality.
Kob	<i>Adenota kob</i>	26	Uganda, Lake Chad.
Kob, White-eared	<i>A. kob leucotis</i>	26	White Nile.
Puku	<i>A. vardoni</i>	20½	North Rhodesia, Tanganyika.
† Grey or Vaal Rhebok	<i>Pelea capreolus</i>	11½	South Africa.
Reedbuck	<i>Redunca eleotragus arundinum</i>	17	Rhodesia, Nyasaland, Zululand.
Reedbuck (Mountain) or Rooi Rhebok	<i>R.R. fulvorufula</i>	9	South Africa, Kenya.
Reedbuck, Bohor	<i>R. redunca</i>	16½	Sudan, Kenya.
† Dibatag	<i>Ammodorcas clarkei</i>	12½	Somaliland.
† Impala	<i>Aepyceros melampus</i>	32	Kenya, Tanganyika.
(Pretty heads, but common.)			
† Gazelle, Edmi or Atlas	<i>Gazella cuvieri</i>	14½	Algeria.
Gazelle, Dorcas	<i>G. dorcas</i>	13½	Sudan, Algeria.
Gazelle, Eritrean	<i>G. littoralis</i>	11½	Red Sea littoral.
Gazelle, Speke's	<i>G. spekei</i>	12½	Somaliland.
Gazelle, Pelzel's	<i>G. pelzelni</i>	14	Somaliland.
† Gazelle, Rhim or Loder's	<i>G. leptoceros</i>	16½	Egypt, Tunisia.
Gazelle, Heuglin's	<i>G. tilonura</i>	11½	Blue Nile, Eritrea.
Gazelle, Korin or Red-fronted	<i>G. rufifrons</i>	13½	Sudan, Nigeria.
Gazelle, Mongalla	<i>G. albonotata</i>	13½	Sudan.
Gazelle, Thompson's	<i>G. thomsoni</i>	16½	Kenya, Tanganyika.
Gazelle, Grant's	<i>G. granti</i>	30	Kenya, Tanganyika.
Gazelle, Ariel or Soemmerring's	<i>G. soemmerringi</i>	23	Somaliland, Sudan.
† Gazelle, Dama or Addra	<i>G. dama</i>	15½	Sudan, Lake Chad.
Springbuck	<i>Antidorcas marsupialis</i>	19	South Africa, South-west Africa, Angola.
Gerenuk or Waller's Gazelle	<i>Lithocranius walleri</i>	17	Somaliland, Kenya.
* Sable, Giant	<i>Hippotragus niger varianti</i>	64½	Angola.
Sable, typical race	<i>H. niger</i>	52½	North Rhodesia, Tanganyika.
Roan Antelope	<i>H. equinus</i>	37½	Sudan, Rhodesia.
* Gemsbuck	<i>Oryx gazella</i>	48	South Africa, South-west Africa, Angola.
Beisa	<i>O. beisa</i>	39	Somaliland, Kenya.
Beisa, Fringe-eared	<i>O. beisa callotis</i>	35½	Kenya, Tanganyika.
* White Oryx	<i>O. algazel</i>	45½	Lake Chad, Sudan.
* Addax	<i>Addax nasomaculatus</i>	40	Lake Chad, Sudan.
Bushbuck	<i>Tragelaphus scriptus</i>	21½	Nyasaland, Uganda, Kenya, Sudan.
* Nyala	<i>T. angasi</i>	31½	Zululand, Nyasaland.
* Mountain Bushbuck or Nyala	<i>T. buxtoni</i>	44	Abyssinia.
† Situtunga	<i>Limnotragus spekei</i>	36½	Rhodesia, Uganda, Sudan, West Africa.
* Kudu	<i>Strepsiceros strepsiceros</i>	66½	South Africa, Rhodesia, Tanganyika, Eritrea.
† Lesser Kudu	<i>S. imberbis</i>	35½	Somaliland, Kenya, Abyssinia.
* Bongo	<i>Boöercus eurycercus</i>	39½	Kenya, West Africa.
* Eland, "Giant" Lord Derby's	<i>Taurotragus derbianus</i>	44½	West Africa, Sudan.

* Denotes Rare, a good trophy, and good hunting.

† Denotes Uncommon or Local, nice heads, and very often good hunting.



Top Left. BONGO.
Bottom Left. SITUTUNGA.

Plates 138—141
Top Right. MOUNTAIN NYALA.
Bottom Right. ZULULAND NYALA.

Name of Animal.		Rowland Ward's Record Measurement. Inches.	Best Locality.
Eland, typical race	<i>T. oryx</i>	{ 43½ } 37	Rhodesia, Nyasaland.
*Ibex, Abyssinian	<i>Capra walie</i>	44	Abyssinia.
*Ibex, Nubian	<i>C. nubiana</i>	47½	Red Sea Province, North Africa.
*Barbary Sheep	<i>Ammotragus lervia</i>	33½	North Africa, Sudan.
*Buffalo	<i>Syncerus caffer</i>	56½	Kenya, Uganda, Rhodesia, Sudan.
Buffalo, Red or Dwarf	<i>S. nanus</i>	34½	Lake Chad, West Africa.
Black Rhinoceros	<i>Rhinoceros bicornis</i>	{ 53½ } 47	Kenya, Tanganyika, Rhodesia.
*White Rhinoceros	<i>R. simus</i>	62½	South Africa, Sudan, Uganda.
		Record Weight of Tusks. Lbs.	
*Elephant	<i>Elephas africanus</i>	{ 198 } 174	Lake Albert, Kenya, Sudan, Tanganyika, Uganda.

* Denotes Rare, a good trophy, and good hunting.

† Denotes Uncommon or Local, nice heads, and very often good hunting.

APPENDIX TWO

GAME ORDINANCES

SUDAN GAME LAWS

Fees for Licences

THE fees payable in respect of licences shall be as set out in the second column hereunder but licences may be issued at the reduced rate shown in the third column to—

- (a) Officers and officials of the Sudan Government.
- (b) Officers and officials of the British and Egyptian Governments if serving in the Sudan or Egypt.
- (c) Officers of the Uganda Garrisons and officers and officials of the Uganda Administration.
- (d) Persons ordinarily resident in the Sudan, with the approval of Civil Secretary.

<i>Description of Licences.</i>	<i>Full Fee.</i>	<i>Reduced Fee.</i>
	£s.	£s.
For an "A" licence	60	6
For a "B" licence	6	1
For a "C" licence. Special for Northern Kordofan, Northern Darfur and Dongola	15	3
For a "D" licence. Special for Red Sea Province	10	2
For an "E" or Traveller's licence, for one or more consecutive days not exceeding four. No more than three such licences shall be issued to any one person in any one year	1	—

Additional Fees Payable on the Killing of Specified Animals

An additional fee of amount shown in the table below shall be paid by the holder of an "A" licence in respect of every animal killed of the species mentioned in the said table.

The Table

<i>Name of Animal.</i>	<i>Fee Payable on "A" Licence at Full Rate.</i>	<i>Fee Payable on "A" Licence at Reduced Rate.</i>
Elephant	£s. 10 in Blue Nile, Fung and Kassala provinces, £s. 15 elsewhere.	The same as by the holder of an "A" licence at full rate.
Eland (Giant)	£s. 5.	Nil.

The additional fee aforesaid in the case of elephants shall be paid by the holder of any licence who kills an elephant notwithstanding that

such licence holder killed the elephant while acting in defence of property or person;

Provided that the Game Warden may dispense with the payment of such additional fee in any case in which it appears to him to be just and reasonable to do so.

Every holder of a licence shall report in writing to the Game Warden, Khartoum, at the first opportunity the killing of any animal in respect of which he is hereby required to pay an additional fee and shall either pay the amount of such fee into a Government chest to the credit of the Game Preservation Department and inform the Game Warden of the number and date of the order by which he paid it in and the place where the payment was made or transmit the amount of the fee to the Game Warden with the report.

Licences for Dinder or Setit to be Specially Endorsed

No licence holder shall hunt on the rivers Dinder or Setit or within 20 miles of either of these rivers unless his licence is specially endorsed for hunting on the river Dinder or the river Setit as the case may be.

Sanctuaries for Game and Reserves

The districts hereinafter described are hereby constituted a reserve for animals namely:

(1) The District bounded on the North by the Rejaf-Aba Road, on the South by the boundary of the Uganda Protectorate, on the East by the Bahr el Jebel and on the West by the boundary of the Belgian Congo.

(2) The triangle formed by the Bahr el Zeraf, Bahr el Jebel and White Nile as far south as the Zaraf Cut Number 1.

(3) The District enclosed by the rivers Setit, Atbara, Bahr es Salam and the Abyssinian frontier.

(4) The District in Khartoum and Berber Provinces on the West Bank of the Nile adjoining the Shabluka gorge bounded on the East by the River Nile, on the South by a line drawn from a point on the West Bank of the Nile opposite the South end of Jebel Foyan parallel to the boundary between Khartoum and Berber Province for a distance of 20 miles, on the North by a line drawn parallel to aforesaid South boundary and distant 15 miles from it, on the West by a line joining the Western extremities of the aforesaid North and South boundaries.

"A" Licence at Full Rate

Animals, a limited number of which may be killed by the holder of a licence "A" at full rate and the number of each species which may be killed on such licence:—

<i>Name of Animal.</i>	<i>Number that may be Killed.</i>
Addax	3
Bongo	1
Buffalo	2
Bushbuck (Giant)	2
Bushbuck (Harnessed)	3
Bushpig	2

<i>Name of Animal.</i>	<i>Number that may be Killed.</i>
Cheetah	1
Kob	4
Dikdik	2
Duiker (Blue)	2
Duiker (Red)	1
Duiker (Yellow-backed)	1
Eland (Giant)	1
Eland (Lesser)	1
Elephant	2
Forest Hog	1
Gazelle (Addra)	2
Gazelle (Grant's East of Boya Hills only)	4
Gazelle (Mongalla)	2
Gazelle (Rufifrons)	2
Gazelle (Soemmering's)	4
Gazelle (all others)	4
Hartebeest (Heuglin's)	2
Hartebeest (Neumann's)	1
Hartebeest (Tora)	2
Hippopotamus	1
Ibex	2
Klipspringer	1
Kudu (Greater)	1
Kudu (Lesser)	1
Monkey (Colobus)	1
Nile Lechwe (Mrs. Gray's)	1
Oribi	4
Oryx Algazal	2
Oryx Beisa	1
Reedbuck	2
Roan Antelope	2
Sheep (Wild)	1
Situtunga	2
Tiang	4
Warthog	2
Waterbuck	4
Zebra	1

and the following birds:

Bustard	4
Crane (Crowned)	2

N.B.—Both Rhinos prohibited.

Not more than one Giant Eland and one Nile Lechwe in all shall be killed by any one person however long the period the licence holder may be in the Sudan or however great the number of licences that he may hold, and the numbers given are conditional on the number of these animals killed by the licence holder by virtue of any previous licence. Not more than three Nile Lechwe may be killed by any one party. In cases of doubt the Game Warden shall decide whether licence holders are or have been hunting as one party and his decision shall be final.

"B" Licence

Animals, a limited number of which may be killed by the holder of a licence "B" at full rate and the number of each species which may be killed on each such licence:—

<i>Name of Animal.</i>	<i>Number that may be Killed.</i>
Bushbuck (Harnessed)	2
Bush Pig	1
Bustard	2
Crane (Crowned)	1
Dikdik	1
Duiker (Blue)	1
Gazelle (Rufifrons)	2
Gazelle (Soemmering's)	2
Gazelle (other than species mentioned by name in Class 4)	4
Hartebeest (Heuglin's)	2
Oribi	2
Reedbuck	1
Tiang	2
Warthog	1
Waterbuck	2

"C" Licence

Animals, a limited number of which may be killed by the holder of the special licence to Northern Kordofan, Northern Darfur and Dongola Province and the number of each species which may be killed on each such licence:—

<i>Name of Animal.</i>	<i>Number that may be Killed.</i>
Addax	3
Addra	3
Bustard	4
Cheetah	1
Crane (Crowned)	2
Gazelle (Rufifrons)	4
Gazelle (other than species mentioned by name in Class 4)	8
Kudu	1
Oryx (Alagazal)	3
Tiang	4
Warthog	2
Wild Sheep	2

"D" Licence

Animals, a limited number of which may be killed by the holder of the special licence limited to the Red Sea Province and the number of each species which may be killed on each such licence:—

<i>Name of Animal.</i>	<i>Number that may be Killed.</i>
Bustard	4
Dikdik	2
Gazelle (Soemmering's)	4
Gazelle (other than species mentioned by name in Class 4)	4
Ibex	2
Klipspringer	1
Kudu	1
Oryx Beisa	1
Warthog	2
Wild Sheep	2

"E" Licence for Travellers

Animals, a limited number of which may be killed by the holder of an

"E" licence, and number of each species which may be killed on each such licence:—

<i>Name of Animal.</i>	<i>Number that may be Killed.</i>
Bustard	1
Gazelle (Soemmering's) or Gazelle (Rufifrons)	1
Gazelle (other than species mentioned by name in Class 4)	1
Hartebeest (Heuglin's) or Waterbuck or Tiang	1
Oribi	1
Warthog	1

EPITOME OF KENYA GAME LAWS

BY CAPTAIN A. T. A. RITCHIE

The Game Ordinance at present consists of a host of amendments and additions superimposed on the main Ordinance of 1921. A number of Proclamations and Rules further complicate game legislation. A consolidating Ordinance is in process of preparation and it is anticipated that it will come into force during 1932, but it is unlikely materially to alter the substance of existing legislation. An epitome of the present game laws is given hereunder.

Where the word "killed" is used, it may be taken to include hunting, capturing, or unduly molesting for any purpose whatever.

1. Any animal mentioned in any of the Schedules (hereto appended) is a "game animal" for purposes of the Game Ordinance.

2. No game animal may be killed without the appropriate game licence or Governor's Permit; except that—

(a) Any game animal may be killed in defence of person or property without licence, permit, or restriction, if such killing is absolutely necessary on the score of personal danger or material damage.

(b) Lion and Cheetah may be killed without licence, permit, or restriction in certain zones.

3. Certain game animals may only be killed under Special Licence or Governor's Permit (cf. First Schedule).

4. The females of certain game animals accompanied by their young and the young themselves of those game animals, may only be killed under Governor's Permit (cf. Second Schedule).

5. Other game animals may be killed by the holders of the appropriate licences to the numbers stated on the Schedules (cf. Third Schedule, Parts A and B).

6. No game animal, or trophy or meat of a game animal, may be sold within the Colony, or exported from the Colony, without a permit in writing issued by the Game Warden's Office.

7. The following are offences:—

(a) To kill any game animal on Crown land during the hours of darkness (except as in para. 2 (a) and (b) *supra*).

(b) To hunt any game animal with dogs on Crown land unless with the written permission of the Game Warden (except as in para. 2 (a) and (b) *supra*).

(c) To kill any game animal on Crown land by traps or poison (except as in para. 2 (a) and (b) *supra*).

(d) To shoot on private land without the consent of the owner of the land or his agent.

(e) To cause unnecessary or undue suffering to any game animal.

(f) To kill any animal in a Game Reserve.

(g) To attempt to obtain a licence to which the applicant is not entitled.

8. The legislation dealing with motor cars and aeroplanes is as follows:—

(a) No person shall approach, in a motor vehicle or aeroplane, to within shooting range of any game animal for the purpose of hunting, killing, capturing or unduly disturbing such animal.

(b) No person shall use a motor vehicle or aeroplane in such manner as to drive or stampede game for any purpose whatsoever.

(c) No person shall shoot at any animal from a motor vehicle or aeroplane or from within two hundred yards of a motor vehicle or aeroplane.

Provided that nothing in this Proclamation shall be deemed to prohibit—

(a) the use of a motor vehicle or aeroplane for the purpose of approaching game areas and for locating game;

(b) the driving of any animal from any private land by the owner thereof, or any person authorized by him;

(c) the driving of any animal from any Government or licensed aerodrome;

(d) the hunting, killing, or capturing of any animal on private land by the owner thereof, or any person authorized by him.

9. Heavy penalties are provided for breaches of the Game Ordinance. The Game Warden and his staff, including Honorary Game Wardens, have wide powers of search and arrest without warrant.

10. A conviction under the Game Ordinance automatically cancels any licence under the Ordinance held by the convicted person; and also imposes a three-year disability as to obtaining further licences under the Ordinance: the Governor however may set aside the disability and the cancellation, if he sees fit.

11. The following game licences are at present in force:—

Visitor's Full, £100.¹

Visitor's Private Land, £10.¹

Serving Officer's, £20.¹

Resident's Full, £10.²

Resident's 14-day, £3.

Resident's Private Land, £2.²

1st Elephant, £25.³

2nd Elephant, £50.³

1st Rhino, £10.³

2nd Rhino, £10.³

Giraffe, £15.³

Ostrich, £1.³

¹ Available for 12 months from date of issue.

² Available till 31st December.

³ Issued only to holders of Full or Serving Officer's Licences and available only during validity of such major licences.

In addition to the above, 1st and 2nd Rhino licences at £10 each available for private land only are issuable to holders of Visitor's Private Land Licences.

Private Land Licences are convertible into Full Licences on payment of the difference in fees.

A visitor holding a Visitor's Full Licence and becoming a resident during the validity of his licence is entitled to a refund of £90. A serving officer under similar circumstances can claim a refund of £10.

Governor's Permits, issued for scientific or other purposes, may allow certain specified animals to be shot, the fees payable and conditions attached being at the discretion of the Game Warden under the Governor's delegated powers. Shooting *à la carte*, within narrow limits, is thus provided for.

12. A few comments on the Game Laws may not be out of place. The objects aimed at in game legislation are briefly and frankly as follows:—

(a) To retain as much game in the Colony as is consistent with the varied human interests—white settlement, and native husbandry, development, and evolution; and to avoid, so far as possible, any conflict between such interests and the indigenous fauna.

(b) To cater for both resident and visiting sportsmen, be they armed with rifle or camera; to maintain as high a standard of sportsmanship as possible, and to prevent slaughter for gain.

(c) To bring as much money into the coffers of the Colony, on account of its game, as is consistent with due and necessary preservation.

Innumerable criticisms may be, and are, levelled against the Game Laws: that is inevitable where so many varied, and even opposing, interests claim consideration. I believe, however, that anyone who is sufficiently interested to acquaint himself fully with the facts in any particular direction will agree that equity and common sense—with admittedly a certain inevitable opportunism!—have gone to the drafting of them.

Licences may be high; the best is never the cheapest—in first cost. Some enactments may be harsh; unhappily not all owners of rifles are sportsmen, and laws must always be made to restrain those who are naturally lawless.

Rules and Regulations

The following animals may be hunted, killed or captured on Crown land by the holder of a Visitor's Full, Serving Officer's or Resident's Full Licence:—

1. Lion	4
but only 2 may be hunted, killed or captured in the Masai Reserve.	
2. Cheetah	1
3. Hippopotamus (except as provided in First Schedule)	2
but only 1 may be hunted, killed or captured elsewhere than in Lake Victoria.	
4. Buffalo (except as provided in First Schedule)	6
5. Common Zebra	20
6. Grevy's Zebra	6
but only 1 may be hunted, killed or captured south of Northern Uaso Nyiro.	

7. Eland	2
8. Greater Kudu, male only	1
and only in the following areas:—	
(a) Turkana Province,	
(b) Northern Frontier Province, excluding however the area lying within a radius of 30 miles from Marsabit Administrative Post.	
9. Lesser Kudu	6
10. Bongo	2
but only 1 may be hunted, killed or captured in the area comprised by the Aberdare and Kinangop ranges.	
11. Sable	1
12. Roan	1
but only in the Masai Reserve and South Kavirondo District.	
13. Wildebeeste	20
but only 4 may be hunted, killed or captured elsewhere than in the Masai Reserve.	
14. Waterbuck, <i>Defassa</i>	2
15. Waterbuck, <i>Ellipsiprymnus</i>	2
16. Oryx, Beisa	6
17. Oryx, Fringe-eared	4
18. Topi (except as provided in First Schedule)	6
19. Hartebeeste, Coke's	10
20. Hartebeeste, Jackson's (except as provided in First Schedule)	1
21. Hartebeeste, other than Coke's and Jackson's, altogether	1
22. Hunter's Antelope	1
but only west of the Bura-Lamu Road.	
23. Situtunga	1
24. Impala (except as provided in First Schedule)	5
25. Bushbuck	20
26. Reedbuck, Bohor	10
27. Reedbuck, Chanler's	2
28. Grant's Gazelle	10
but not more in any one area than as follows:—	
(a) Northern Frontier Province	10
(b) Turkana Province	8
(c) Masai and Nyanza Provinces together	4
(d) Nakuru, Kikuyu and Ukamba Provinces together	4
(e) Coast Province excluding Voi District	2
(f) Voi District	4
29. Peters' Gazelle	2
30. Thomson's Gazelle	20
31. Gerenuk	8
but not more than 2 may hunted, killed or captured elsewhere than the Northern Frontier Province.	
32. Klipspringer	2
33. Steinbuck	4
34. Oribi, Haggard's	4
35. Oribi, Kenya	1
36. Oribi, other than Haggard's and Kenya, altogether	10
37. Duiker, any species, altogether	20
38. Dikdik, any species, altogether	20
39. Pygmy Antelope	6
40. Colobus Monkey	3
41. Blue Monkey	3

The following animals may be hunted, killed or captured on Crown land by the holder of a Resident's Fourteen-Day Licence:—

1. Lion	1
2. Buffalo (except as provided in First Schedule)	1
3. Common Zebra	5
4. Grevy's Zebra	1
but only north of Northern Usao Nyiro.	
5. Lesser Kudu	1

6.	Wildebeest	5
	but only 1 may be hunted, killed or captured elsewhere than in the Masai Reserve.	
7.	Waterbuck	1
8.	Oryx, Beisa	1
9.	Oryx, Fringe-eared	1
10.	Topi (except as provided in First Schedule)	1
11.	Hartebeeste, Coke's	2
12.	Impala (except as provided in First Schedule)	1
13.	Bushbuck	5
14.	Reedbuck, Bohor	2
15.	Grant's Gazelle	4
	but not more in any one area than as follows:—	
	(a) Northern Frontier Province	2
	(b) Turkana	2
	(c) Masai and Nyanza Provinces together	1
	(d) Nakuru, Kikuyu and Ukamba Provinces together	1
	(e) Coast Province	1
16.	Thomson's Gazelle	5
17.	Gerenuk	2
	but only in Northern Frontier Province.	
18.	Steinbuck	1
19.	Oribi, Haggard's	1
20.	Oribi, other than Haggard's and Kenya, altogether	1
21.	Duiker, any species, altogether	5
22.	Dikdik, any species, altogether	5
23.	Pygmy Antelope	1

GAME RESERVES

1. *The Southern Reserve.*

An area bounded by a line following the right bank of the Ngong River from the railway line to the point where the Kajiado road crosses the Ngong River, thence following the road to the point where it crosses the Mbagathi River, thence by a line of beacons to the Survey beacons on the Ngong Hills (Donyo Lamuyu), thence to Mt. Suswa by a line of beacons and from Suswa thence S.W. by a line of beacons to Mosiro the trading centre on the Uaso Nyiro, and thence following the left bank of the river to the border. Thence following the border to the beacon at Usiri, thence to the source of the Rombo River, which it follows till its junction with the Tsavo River. Thence by the left bank of the Tsavo River to a beacon at the point where the Ngulia and Kyulu Hills approach the river. Thence following the foot of the eastern slope of Kyulu Hills to Mount Kchumba. From there in a straight line to the beacon as the source of the Makindu River which it follows to the Uganda Railway. From the Makindu River the line follows the Railway to the Ngong River.

2. *The Northern Reserve.*

Eastern Boundary.—Starting at the ford at “Kampi ya Nyama Yangu” on the Northern Eusso Nyiro River the boundary runs in a straight line to the summit of Kortogor (Ooigoitoga) Hill (Survey beacon 4067 feet), thence to the summit of Kalama Hill, thence to the summit of Lololokwi Hill, thence northward along the foot of the eastern slope of Uaraguesgo Hill and the Matthews Range to the northernmost end of the latter

(approximately on latitude, $1^{\circ} 30' N.$), thence in a straight line in a north-easterly direction to the summit of Lomoton Hill, thence to the summit of Lodermut Hill (Survey point 4712 feet), thence to the summit of Lolajonga Hill (Survey point 3512 feet), approximately 15 miles south-west of Marsabit Lake.

Northern Boundary.—Thence in a straight line to the summit of Mount Nyiro (N.B.—This line crosses the Orr Valley west of Mount Nyiro at what is known as the “second stream”).

Western Boundary.—Thence in a straight line to the summit of Kowop Hill, thence in a straight line to the western scarp of Loroki Hill (Survey point 8090 feet), thence in a straight line to the summit of Pakka Hill (Survey beacon 5575 feet).

Southern Boundary.—Thence in a straight line to the summit of Ol Doinyo Oiroua or Kuti (Survey Beacon 6905 feet), thence in a straight line to the junction of the Northern E. Uaso Nyiro and E. Uaso Narok Rivers, thence down the left (north) bank of the former to the ford at Kampi ya Nyama Yangu, the point of commencement.

EXTRACT FROM UGANDA GAME ORDINANCE

Game Licences

Game Licences may be issued at discretion by any Administrative Officer or by any other person authorized on that behalf by the Governor.

The various kinds of Game Licences and the fees chargeable in respect of each kind shall be stated hereunder, viz.:—

	Shs.	Cts.
(a) A Visitor's (Full) Licence	500	00
(b) A Visitor's (Fourteen-day) Licence	100	00
(c) A Resident's (Full) Licence	100	00
<i>(See below for definition of a Resident.)</i>		
(d) A Resident's (Fourteen-day) Licence	40	00
(e) A Bird Licence	10	00
(f) A Professional Hunter's Licence	10	00

The Governor in Council may by order reduce or increase any or all of these fees.

A Resident's (Full) Licence, a Visitor's (Full) Licence and a Bird Licence shall be in force for one year from and inclusive of the day of issue.

A Professional Hunter's Licence shall be in force for one year from and inclusive of the day of issue.

A Resident's (Fourteen-day) Licence and a Visitor's (Fourteen-day) Licence shall be in force for fourteen days from and inclusive of the day of issue.

Not more than one (Fourteen-day) Licence of either kind shall be issued to the same person within a period of one year from and inclusive of the day of issue of the first licence.

A (Full) Licence of either kind shall not be issued to the holder of a (Fourteen-day) Licence of either kind within a period of six months from and inclusive of the day of issue of the (Fourteen-day) Licence.

Provided that a Visitor's (Fourteen-day) Licence may be converted into a Visitor's (Full) Licence, or a Resident's (Fourteen-day) Licence may be converted into a Resident's (Full) Licence at any time on condition that the (Full) Licence shall date from the date of issue of the (Fourteen-day) Licence on payment of the difference between the fees and on the further condition that any animal killed or captured under the (Fourteen-day) Licence shall count towards the number allowed on the (Full) Licence.

No person shall hold two (Full) Licences at the same time whether of the same kind or of different kinds, and no person shall hold a (Full) Licence of either kind and a (Fourteen-day) Licence of either kind at the same time.

A Resident's Licence of either kind shall be granted only to those persons mentioned below, viz., to:—

- (a) A *bonâ fide* Resident;
- (b) Any Commissioned Officer of His Majesty's Army, Navy or Air Force, on the active list;
- (c) Any European Official in the service of the Government of Kenya, Tanganyika, Zanzibar or the Sudan.

A Visitor's (Full) Licence and a Resident's (Full) Licence respectively entitle the holder to hunt, kill, or capture animals of the species and to the number mentioned in the Third Schedule.

A Visitor's (Fourteen-day) and a Resident's (Fourteen-day) Licence respectively entitle the holder to hunt, kill or capture animals of the species and to the number mentioned in the Fourth Schedule.

The holder of a (Full) Licence of either kind or of a (Fourteen-day) Licence of either kind shall, during the currency of that licence, be deemed to be also the holder of a Bird Licence.

Special Licences

Any Administrative Officer may on the application of the holder of a Visitor's (Full) Licence or a Resident's (Full) Licence grant to him a licence to be known as a Special Licence, authorizing the holder to hunt, kill, or capture either one or two elephants or one bull giraffe; or, provided that the sanction of the Governor has first been obtained to the issue of the Special Licence, one white rhinoceros. Such Special Licence shall not, however, authorize the holder to hunt, kill or capture any elephant unless one tusk of that elephant weighs at least thirty pounds.

The provisions of section fourteen shall not apply to any tusk obtained from any elephant lawfully killed under a Special Licence.

The Governor in Council may by order fix the fees payable in respect of each Special Licence and unless and until any such order be made the following fees shall be payable, viz.:—

	Shs.	cts.
For a Licence in respect of one elephant	200	00
Ditto (when issued to a native)	100	00
For a Licence in respect of two elephants	600	00
Ditto (when issued to a native)	500	00
For a Licence in respect of one bull giraffe	300	00
For a Licence in respect of one white rhinoceros	500	00

Every Special Licence shall expire on the same date as the Visitor's (Full) Licence or Resident's (Full) Licence by virtue of which it shall have been granted.

During the currency of any Visitor's (Full) Licence or Resident's (Full) Licence the holder thereof may be granted not more than one Special Licence of one kind.

Provided however that—

(1) if such holder has taken out a Special Licence in respect of one elephant he may during the currency of that Licence and on payment of an additional fee of four hundred shillings be granted a Special Licence in respect of a second elephant;
and

(2) nothing in this section shall prevent the holder of a Special Licence in respect of one species of animal from obtaining the grant of a Special Licence in respect of another species of animal.

No Special Licence shall be granted unless the applicant produces to the issuing officer the Visitor's (Full) Licence or Resident's (Full) Licence by virtue of which the application may be granted.

FIRST SCHEDULE

PART A

Animals not to be hunted, killed or captured throughout the whole Protectorate except under Governor's Permit:—

1. Gorilla—*Gorilla beringei*.
2. Chimpanzee—*Pan schubotzi*.
3. Roan Antelope (Female)—*Hippotragus equinus langheldi*.
4. Greater Kudu (Female)—*Strepsiceros strepsiceros bea*.
5. Ostrich—*Struthio camelus*.
6. Heron—All species.
7. Egrets—*Casmerodius albus melanorhynchus*.
Mesophoyx intermedius brachyrhynchus.
Egretta garzetta garzetta.
Bubulcus ibis.
8. Whale-Headed Stork—*Balaeniceps rex*.
9. Saddle-Bill Stork—*Ephippiorhynchus senegalensis*.
10. Marabou Stork—*Leptoptilos crumeniferous*.
11. Greater Flamingo—*Phoenicopterus ruber antiquorum*.
12. Lesser Flamingo—*Phoeniconaias minor*.
13. Secretary Bird—*Sagittarius serpentarius*.
14. Vulture (any species)—*AEGYPTIDAE*.
15. E.A. Crowned Crane—*Balearia regulorum gibbericeps*.
16. Ground Hornbill—*Bucorvus abyssinicus*.
17. Owl (any species)—*TYTONIDAE* and *STRIGIDAE*.

PART B

Animals not to be hunted, killed or captured, in the areas stated, except under Governor's Permit:—

1. Uganda Kob—*Adenota kabi thomasi* (in Masaka District).
2. Roan Antelope—*Hippotragus equinus langheldi* (in Masaka and Ankole Districts).
3. Situtunga—*Limnotragus spekei* (on Nkosi Island).
4. Eland—*Taurotragus oryx* (the whole Protectorate with the exception of Karamoja, Ankole and Chua Districts).
5. Hippopotamus—*Hippopotamus amphibius amphibius* ((a) In the Nabajuzi and Bugugu Rivers of the Masaka District, (b) In that portion of Lake Victoria and the River Nile situated between Jinja and Bugongu Piers and the Ripon Falls).
6. Black Rhinoceros—*Diceros bicornis holmwoodi* (in West Nile District and in the West Madi Area of the Gulu District).
7. Elephant—*Loxodonta africanus* (in the Gulu Sleeping Sickness area on the right bank of the Albert Nile).

PART C

Animals not to be hunted, killed or captured throughout the whole Protectorate except under Governor's Permit if

(a) IMMATURE.

(b) FEMALE ACCOMPANIED BY YOUNG.

1. All Antelopes, which includes Gazelles and Dik-Diks.
2. Giraffe—*Giraffa camelopardalis*, all races.
3. Black Rhinoceros—*Diceros bicornis holmwoodi*.
4. White Rhinoceros—*Ceratotherium cottoni*.
5. Elephant—*Loxodonta africanus*.

SECOND SCHEDULE

Animals which may be killed or captured under Special Licence:—

1. Giraffe—*Giraffa camelopardalis*, all races.
2. White Rhinoceros—*Ceratotherium cottoni*.
3. *Elephant—*Loxodonta africanus*.

THIRD SCHEDULE

Animals which may be killed or captured by the holder of a Visitor's (Full) Licence or of a Resident's (Full) Licence:—

- | | |
|---|----|
| 1. Colobus Monkey— <i>Colobus caudatus</i> and <i>C. occidentalis</i> | 4 |
| 2. Blue Monkey— <i>Cercopithecus leucampix Elgonis</i> | 4 |
| 3. Cheetah— <i>Acinonyx jubatus</i> | 1 |
| 4. Buffalo— <i>Syncerus caffer raddiffei</i> and <i>S. c. aequinoctialis</i> | 10 |
| 5. Lelwel Hartebeest— <i>Alcelaphus lelwel</i> , all races combined including <i>jacksoni</i> | 10 |
- (But six only in Western Province, or Northern Province (except in Chua district), or Eastern Province (except in Karamoja district); four only in Buganda Province).

* Subject to the exceptions contained in Part B of the First Schedule.

6.	Topi— <i>Damaliscus korrigan</i> , all races combined	4
	(But one only in Masaka District).	
7.	Yellow-backed Duiker— <i>Cephalophus sylvicultrix</i>	2
8.	Red (Forest) Duiker— <i>Cephalophus natalensis</i> , all races combined	10
9.	Blue Duiker (Ntalaganiya)— <i>Cephalophus melanorheus</i>	10
10.	Common Duiker— <i>Sylvicapra grimmii</i> , all races combined	10
11.	Klipspringer— <i>Oreotragus oreotragus</i> , all races combined	8
12.	Oribi— <i>Ourebia montana</i> , all races combined	4
13.	Dik-Dik— <i>Rhynchotragus</i> , all sub-species and races combined	10
14.	Reedbuck— <i>Redunca redunca</i> , all races combined	10
15.	Mountain Reedbuck— <i>Redunca fulvorufula chanleri</i>	2
16.	Waterbuck— <i>Kobus defassa</i> , all races combined	4
	(But two only in combined districts of Karamoja and Chua.)	
17.	*Uganda Kob— <i>Adenota kob thomasi</i> and <i>Adenota kob neumanni</i>	10
	(But four only in Buganda Province, excepting Buyaga County.)	
18.	Impala— <i>Aepyceros melampus rendilis</i>	1
19.	Grant's Gazelle— <i>Gazella granti brightii</i>	4
20.	Oryx— <i>Oryx beisa annectens</i>	2
21.	*Roan Antelope (Male only)— <i>Egocerus equinus langheldi</i> and <i>E. e. bakeri</i>	1
22.	Harnessed Bushbuck— <i>Tragelaphus scriptus bos</i> and <i>T. s. diana</i>	6
23.	Giant Bushbuck— <i>Tragelaphus scriptus locorinae</i>	1
24.	Common Bushbuck— <i>Tragelaphus scriptus dama</i> and <i>T. s. delamerei</i>	20
25.	*Situtunga— <i>Limnotragus spekei spekei</i>	4
26.	Lesser Kudu— <i>Strepsiceros imberbis australis</i>	2
27.	Greater Kudu (Male only)— <i>Strepsiceros s. bea</i>	1
28.	*Eland— <i>Taurotragus Oryx</i>	2
	(But one only in Chua and Ankole.)	
29.	Giant Eland— <i>Taurotragus derbianus gigas</i>	1
30.	Giant (Forest) Hog— <i>Hylochoerus meinertzhageni meinertzhageni</i>	2
31.	*Hippopotamus— <i>Hippopotamus amphibius amphibius</i>	2
	Except where not protected: i.e.: (a) River Nile. (b) Shores of Lakes Victoria, Albert, Edward and George.	
32.	Zebra— <i>Equus quagga granti</i>	6
	(But three only in Buganda Province).	
33.	*Black Rhinoceros— <i>Diceros bicornis holmuoodi</i>	1
34.	Any of the Birds mentioned in the Fifth Schedule.	

FOURTH SCHEDULE

Animals which may be killed or captured by the holder of a Visitor's (Fourteen day) Licence or of a Resident's (Fourteen day) Licence:—

1.	Buffalo— <i>Syncerus caffer radcliffei</i> and <i>S. c. aequinoctialis</i>	4
2.	Lelwel Hartebeest— <i>Alcelaphus lelwel</i> , all races combined including <i>jacksoni</i>	2
3.	Topi— <i>Damaliscus korrigum</i> , all races combined	2
	(But none in District of Masaka.)	
4.	Red (Forest) Duiker— <i>Cephalophus natalensis</i> , all races combined	4
5.	Blue Duiker (Ntalaganiya)— <i>Cephalophus melanorheus</i>	4
6.	Common Duiker— <i>Sylvicapra grimmii</i> , all races combined	6
7.	Klipspringer— <i>Oreotragus oreotragus</i> , all races combined	2
8.	Oribi— <i>Ourebia montana</i> , all races combined	3
9.	Dik-Dik— <i>Rhynchotragus</i> , all sub-species and races combined	5
10.	Reedbuck— <i>Redunca redunca</i> , all races combined	4
11.	Waterbuck— <i>Kobus defassa</i> , all races combined	1
12.	*Uganda Kob— <i>Adenota kob thomasi</i> and <i>A. k. neumanni</i>	4
	(But two only in Buganda Province, excepting Buyaga County.)	
13.	Grant's Gazelle— <i>Gazella granti brightii</i>	2

* Subject to the exceptions contained in Part B of the First Schedule.

14.	Oryx— <i>Oryx beisa anneakens</i>	1
15.	Harnessed Bushbuck— <i>Tragelaphus scriptus bos</i> and <i>T. s. diana</i>	2
16.	Common Bushbuck— <i>Tragelaphus scriptus dama</i> and <i>T. s. delamerei</i>	10
17.	*Situtunga— <i>Limnotragus spekei spekei</i>	2
18.	Zebra— <i>Equus quagga granti</i> (But one only in Buganda.)	
19.	Any of the Birds mentioned in the Fifth Schedule.	

FIFTH SCHEDULE

(This schedule refers only to birds)

SIXTH SCHEDULE

Game Reserves

THE BUNYORO GAME RESERVE

1. An area contained within the following boundary:—Commencing from the mouth of the River Sonso the boundary follows the shores of Lake Albert northwards to the Victoria Nile; it then follows the South bank of the Victoria Nile to Foweira; it then follows the old Foweira-Masindi Road up to the point where the River Titi crosses it; then proceeds in a straight line in the direction of the highest point of the Hill Nabazana until it meets the River Waiga; [it then follows the North-Eastern bank of the River Waiga until that river passes the Escarpment; it then follows the top of the Escarpment until it reaches the River Sonso, and then along the north bank of the River Sonso to Lake Albert.

THE TORO GAME RESERVE

2. An area bounded:—

(i) By the left bank of the Muzizi River from its mouth in Lake Albert to the point where it falls over the Escarpment.

(ii) From the top of the Muzizi Falls so indicated by the crest of the Escarpment overlooking the Semliki Valley to the point at Busaiga where the old Fort Portal-Mboga road cuts it.

(iii) Thence following the right-hand side of the said road to the Wasa River.

(iv) Thence following the right bank of the Wasa River to its mouth in Lake Albert.

(v) From the mouth of the Wasa River following the southern shore of Lake Albert to the mouth of the Muzizi River aforesaid.

THE LAKE GEORGE GAME RESERVE

3. The boundary begins at the point where the North bank of the River Mubuku cuts the Fort Portal-Katwe Road, thence it follows the

* Subject to the exceptions contained in Part B of the First Schedule.

said road in a North-Easterly direction to its junction with the track to Kasenda, thence along that track in a North-Easterly direction to the River Wimi, thence along the River Wimi in a South-Easterly direction to its junction with the River Nsonje, thence in a straight line in a South-Easterly direction towards Kavandara Peak to the foot of the Lake George Escarpment, thence along that Escarpment in a Southerly direction to the River Mpanga, thence along the River Mpanga in a South-Westerly direction to its mouth in Lake George, then in a Westerly direction along the Northern shores of Lake George to the mouth of the River Mubuku, thence up stream along the River Mubuku to the point of commencement.

Game Reserve in Semliki Valley, Toro District, has been extended so that its western boundary now coincides with that of the Wasa River Sleeping Sickness Area. This increases the extent of the reserve from 108 to approximately 202 square miles. (Game Department's Report for 1929.)

TANGANYIKA TERRITORY

THE FIRST SCHEDULE

(Visitor's or Resident's Full or Temporary Licence)

Animals of which, in all, including their sub-species, not more than the numbers herein stated may be killed under the authority of a Visitor's or Resident's Full or Temporary Licence.

Provided that, except when one only of a species may be killed, each female killed shall, for the purposes of both Full and Temporary Licences count as two animals.

		Number which may be killed under a Temporary Licence.	Number which may be killed under a Full Licence.
1. Black Rhinoceros	<i>Rhinoceros bicornis</i>	0 ¹	2
2. Hippopotamus	<i>Hippopotamus amphibius</i>	2	4
3. Roan Antelope	<i>Hippotragus equinus</i>	1	3
(In Tabora or Ufipa districts holders of a Resident's Full Licence may shoot an additional three Roan Antelopes and holders of a Resident's Temporary Licence may shoot an additional two Roan Antelopes.)			
4. Sable Antelope	<i>Hippotragus niger</i>	2	4
5. Fringe-eared Oryx	<i>Oryx callotis</i>	1	3
6. Topi	<i>Damaliscus korrigum jimela</i>	3	5
7. Wildebeest	<i>Gorgon species</i>	3	
8. Coke's Hartebeest	<i>Bubalis cokei</i>	3	20
9. Lichtenstein's Hartebeest	<i>B. lichtensteini</i>	3	
10. Lelwel Hartebeest including Jackson's	<i>Bubalis lelwel</i>	2	4
11. Buffalo	<i>Bos caffer</i>	3	6
12. Bushbuck	<i>Tragelaphus scriptus</i>	4	15
13. Situtunga	<i>Tragelaphus spekei</i>	1	2
14. Lesser Kudu (males only)	<i>Strepsiceros imberbis</i>	1	3
15. Greater Kudu (males only)	<i>Strepsiceros strepsiceros</i>	1	2

¹ Amended by Government Notice, No. 69 of 1928.

		Number which may be killed under a Temporary Licence.	Number which may be killed under a Full Licence.
16. Eland	<i>Taurotragus oryx</i>	2	4
17. Reedbuck	<i>R. redunca</i> and <i>arundinum</i>	} Combined 4	12
18. Mountain Reedbuck including Chanler's	<i>Oreodorcas fulvorufula</i>		
19. Defassa Waterbuck	<i>Kobus defassa</i>	2	4
20. Common Waterbuck	<i>Kobus ellipsiprymnus</i>	3	6
21. Puku	<i>Kobus vardoni</i>	3	6
22. Kob of remaining species	<i>Kobus kob thomasi</i> , etc.	1	2
23. Red Forest Duiker including Harvey's	<i>Cephalophus natalensis</i> , sub-species	4	10
24. Abbott's Duiker	<i>Cephalophus spadix</i>		1
25. Blue Duiker	<i>Cephalophus monticola</i>	6	15
26. Common Duiker	<i>Sylvicapra grimmii</i>	4	15
27. Pygmy Antelope or Suni	<i>Neotragus moschatus</i>	6	15
28. Oribi, all species combined	<i>Ourebia species</i>	2	6
29. Steinbuck, both species com- bined	<i>Raphiceros species</i>	3	10
30. Klipspringer	<i>Oreotragus oreotragus</i>	2	4
31. Grant's Gazelle	<i>Gazella granti</i>	4	8
32. Thomson's Gazelle	<i>Gazella thomsoni</i>	4	14
33. Gerenuk (males only)	<i>Lithocranius Walleri</i>	1	2
34. Impalla	<i>Aepyceros melampus</i>	4	10
35. Dikdik, all species combined	<i>Rhynchotragus species</i>	6	20
36. Common or Quagga Zebra	<i>Equus quagga</i>	3	15
37. Colobus, all kinds combined	<i>Colobus species</i>	2	4
38. "Kima" or "Sykes" Monkey	<i>Cercopithecus albogularis</i>	5	10
39. Ostrich	<i>Struthio species</i>	1	2

THE SECOND SCHEDULE

(Resident's Full Licence)

Animals of which, in addition to those specified in the First Schedule, an unlimited number may be shot under the authority of a Resident's Full Licence:—

1. Bushbuck, males.
2. Common Duiker, both sexes.
3. Buffalo and Hippopotamus in areas that may from time to time be defined by the Governor.

THE THIRD SCHEDULE

(Elephant and Giraffe Licence)

Animals of which not more than the number herein stated may be killed under the authority of an Elephant and Giraffe Licence.

Two elephants, or, if allowed by regulation, three.

One Bull Giraffe.

No elephants shall be knowingly hunted under the authority of an Elephant and Giraffe Licence unless it has at least one tusk weighing 30 lb. or more or such other weight as may be prescribed by regulation, and any tusk which is found to be less than the weight aforesaid shall be the property of the Government.

Unless otherwise prescribed, an Elephant and Giraffe Licence may be granted only to the holder of a Visitor's or Resident's Full Licence, and, unless otherwise prescribed, no person shall, during the period of his Visitor's or Resident's Full Licence, be licensed to kill more than one giraffe and the number of elephants specified above.

THE FOURTH SCHEDULE

(Resident's Minor Licence)

Animals of which, in all, including their sub-species, not more than the numbers herein stated may be killed under the authority of a Resident's Minor Licence.

Provided that, except when one only of a species may be killed, each female shall count as two animals.

Hartebeest of all species, and Wildebeest combined	15
Topi	5
Roan Antelope in Tabora and Ufipa districts only	4
Bushbuck	15
Reedbuck, all species combined	8
Waterbuck, both species combined	4
Puku in Mahenge and Rungwe districts	5
Blue Duiker, Common Duiker and Suni, of each	15
Oribi, all species combined	4
Steinbuck and Thomson's Gazelle, of each	8
Impalla	6
Dikdik	20
Zebra	12
Eland	1
Buffalo	1

THE FIFTH SCHEDULE

(Governor's Licence)

Animals which may only be hunted under the authority of a Governor's Licence:—

1. All Antelopes not specified in the 1st, 2nd, or 4th schedules hereto.
2. All females of Giraffe, Greater and Lesser Kudu, Gerenuk, and Situtunga.
3. Fish-Eagle, Wahlberg's Eagle, Buzzard-Eagle (*Asturina*), Secretary Bird, Ground Hornbill, and any kind of Vulture, Stork (including Marabou), Kestrel, Owl, and Egret, Gorilla and Chimpanzee.¹

¹ Amended by Government Notice, No. 98 of 1923.

THE SIXTH SCHEDULE

(Complete Reserves)

1. KILIMANJARO RESERVE (MOSHI DISTRICT).

The mountain mass of Kilimanjaro bounded by the lower margin of the dense forest belt.

2. MOUNT MERU RESERVE (ARUSHA DISTRICT). (KILIMANJARO.)

The mountain mass of Meru, including the Engurdoto Crater, bounded by the lower margin of the dense forest belt, and including any area lying within the line of beacons marking the forest reserve.

3. NGORONGORO CRATER.¹

The whole of the Ngorongoro Crater in the Arusha District, as bounded by the rim of the crater, but excluding the land alienated therein which is shown coloured pink on plan No. ⁶W 38 signed by the Director of Surveys which can be seen in the Survey Office, Dar es Salaam.

4. LAKE NATRON GAME RESERVE.

Commencing at a point where the new Longido Road from Arusha to Nairobi crosses the boundary of Kenya Colony and Tanganyika Territory between boundary Pillars 42 and 43 the boundary shall follow the western side of the aforementioned road in a southerly direction to a beacon situated on the west side of the road and about 12 miles south of Longido Summit. Thence it shall follow a straight line for a distance of approximately 24 miles in a south-westerly direction to the permanent water hole in the rock in the bed of the Emugur Oretati water course situated near the crossing of the Arusha Engare-Longischo Road and the said water course. Thence it shall follow a straight line in a westerly direction to the triangulation point at Mboloti situated south west of the Kitumbeine Mountain. Thence it shall follow a straight line in a westerly direction until it reaches the confluence of the Engare Rangai and the Lemelopa Rivers. Thence it shall follow the left bank of the Engare Rangai River until it reaches the top of the Eastern escarpment of the Rift Valley. Thence it shall follow the top of the said escarpment in a Northerly direction to the summit of Kerimani Mountain. Thence it shall follow a straight line in N.N.-westerly direction to the triangulation point on the summit of Ol Lengai Mountain. Thence it shall follow a straight line in a N.N.-westerly direction to the summit of Mosonik Mountain. Thence it shall follow the top of the escarpment to the triangulation point situated at Kisare. Thence it shall follow a straight line in a N.N.-easterly direction to the south triangulation point on the summit of Ol Sambu Mountain. Thence it shall follow a straight line in a north-easterly direction to boundary Pillar 33 of the Kenya Colony and Tanganyika Territory Boundary. Thence it shall follow the said Boundary in a south-easterly direction to the point of commencement.²

5. NORTHERN RAILWAY RESERVE (USAMBARA DISTRICT).

Northern boundary: From Same village past the north end of the Kwakoko hill thence to the hill Kitamule, thence to the Pangani River at Marango-Opuni.

¹ Added by Government Notice, No. 137 of 1928.

² Amended by Government Notice, No. 132 of 1928.

Western and Southern boundary: The River Pangani from Marango-Opuni to its bend at Kilometre 190 on the Tanga Railway near Mabirioni. Thence to the top of the southern end of the Pare Mountains.

Eastern boundary: From the last named point along the top of the escarpment northwards, descending finally to the southernmost corner of the plantation (Barry and Taube) behind Makanya and following thence the plantation's south-western and north-western sides to the river, then northwards along the Mwembe River till cut by the Makanya-Same Road, then along this road to Same village.

6. SELOUS RESERVE (MAHENGE, MOROGORO AND RUFJI DISTRICTS).

This consists of the German "Mohoro" and "Mahenge" reserves united.

Northern boundary: The Greater Ruaha from the Kilosa-Mahenge Road to Kindu, thence a line running parallel with the Rufiji and ten miles distant from it to the district boundary between the Rufiji and Morogoro districts; thence this district boundary and the district boundary between the Rufiji and Dar es Salaam districts.

Western boundary: The Kilosa-Mahenge Road to the Msola River, thence following the Msola to the Ulanga and along the Ulanga to the Rufiji.

Southern boundary: The Rufiji.

Eastern boundary: The Mroka-Kisangire Road from the Rufiji to the Msangazi stream, then along this stream to the district boundary between Rufiji and Dar es Salaam.

7. WAMI RIVER RESERVE (MOROGORO DISTRICT).¹

8. LOGI PLAIN RESERVE (MPAPUA SUB-DISTRICT).

Northern boundary: A line from a point where the Changaje River joins the Umerohe River drawn eastwards to the Msajira Mountain, and thence to the village of Wota.

Eastern boundary: A line from Wota southwards to Itengule and thence through Mperemehe to Rudege village on the Mtindiri River, thence the latter river to its junction with the Greater Ruaha.

Southern boundary: The Ruaha and Kisigo Rivers.

Western boundary: The Umerohe River upstream to its junction with the Cha-Ngaje.

9. SABA RIVER RESERVE (DODOMA DISTRICT).

Northern and North-eastern boundary: The road from Kwikuru Kwa-Kiromo following the track through Saba Siswa and Kitete to the Myombe River.

Southern and South-eastern boundary: Upstream along the Myombe and Utambe Rivers to Mamumgulu, thence along the track westwards to Isambwa.

Western boundary: From Isambwa northwards along the course of the Rungwa River as far as Sisa's. Thence the track to Kwa-Msawira, and thence the track through Kisiwa and Mlangari to Kwikuru Kwa-Kiromo.

10. KATAVI PLAIN RESERVE (UFIPA DISTRICT).

Northern boundary: From the gap where the Mkamba River flows through the hills surrounding the Katavi Plain near the village of Mkamba to the summit of Mount Nyamba.

Eastern boundary: Following the summit of the escarpment to the point of slope of Mount Galukilo to the summit of Mount Gongwe, thence south to the Chada Swamp and along its eastern side to its southern end.

¹ Deleted by Government Notice, No. 176 of 1928.

Southern boundary: From the southern end of the Chada Swamp to the summit of Mount Mbusi following the ridge of the Ugoma Hills to the Mkamba gap.

11. MTANDU RIVER RESERVE (KILWA DISTRICT).

Northern boundary: The Mtandu River.

Eastern boundary: The Singa River.

Southern boundary: The Kilwa-Liwale Road.

Western boundary: The Liwale stream.

12. MTETESI RESERVE (LINDI DISTRICT).

Northern boundary: From its intersection by the Mtetesi River the Lindi-Kilwa boundary eastwards to the Mbemkuru River, thence the Mbemkuru River to the entry of the Kibato (Nakahato).

Eastern boundary: The Kihato River to a point near its source where it crosses the track leading to the Bangala River, thence along that track and river to the Lindi-Tunduru Road at Mtimbo.

Southern boundary: The Lindi-Tunduru Road as far as the Mtetesi.

Western boundary: The Mtetesi River.

Ordinary Game Licences

(1) Ordinary Game Licences may be granted by an Administrative Officer at the fees following:—

A Visitor's Full Licence	Shs. 1,500
A Visitor's Temporary Licence	200
A Resident's Full Licence	300
A Resident's Temporary Licence	60
A Resident's Minor Licence	80

(2) The forms of Game Licences are given in the First Schedule hereto.

A Resident's Full, Temporary, or Minor Licence may be issued in accordance with the provisions of the Ordinance, and also to any commissioned officer in His Majesty's Army or Navy on the active list, or to European Government Officials serving in Zanzibar, Kenya Colony and Protectorate, and Uganda.

(1) A Resident's Full Licence and Minor Licence shall be in force until and including the 31st day of March next following the date of issue.

(2) A Visitor's Full Licence shall be in force for one year from and including the date of issue.

(3) Temporary Licences shall be in force for fourteen days from and including the date of issue.

(4) Not more than one Temporary Licence shall be issued to the same person in any year ending on the 31st March, and Temporary Licences issued to the same person in consecutive years shall be divided by a period of at least one month.

(5) Except as authorized by any regulation, no person may be granted more than one Game Licence at the same time, and no holder of a full licence or of a minor licence may be granted a temporary licence during the currency of his full or minor licence.

Elephant and Giraffe Licences

(1) An Administrative Officer may issue only to the holder of a Visitor's Full Licence or a Resident's Full Licence an Elephant and Giraffe Licence to kill not more than two elephants and one giraffe in the form of such licence given in the First Schedule hereto and at the fees specified hereunder, namely:—

1st Elephant	.	.	.	.	.	.	.	.	Shs.	400
2nd Elephant	.	.	.	.	.	.	.	.	"	600
Giraffe	.	.	.	.	.	.	.	.	"	150

(2) An Elephant and Giraffe Licence shall expire on the same date as the full licence in respect of which it was granted.

(3) An applicant for an Elephant and Giraffe Licence shall produce to the Officer granting it his Full Resident's or Visitor's Licence, and such Officer shall endorse thereon particulars of the Elephant and Giraffe Licence. Having killed any giraffe or elephant, the licensee shall immediately notify the nearest Administrative Officer of the fact.

(4) No person shall hunt giraffe in the Arusha District or in the Moshi District.

(5) All regulations as to Game Licences shall apply to Elephant and Giraffe Licences.

A person who has obtained a licence to shoot any elephant and claims not to have fired at an elephant or not to have fired at all the elephants which he is by his licence authorized to kill, may, upon surrendering his licence and producing a written declaration and such other evidence in support of his statement as the Director may require, obtain a refund of the amount overpaid.

*EXTRACT FROM SOMALILAND
PROTECTORATE GAME ORDINANCE*

The Governor may by Proclamation declare any portion of the Protectorate to be a game reserve; and any person who, unless he is authorized by a special licence, hunts, kills, or captures any animal whatever in a game reserve, or is found within a game reserve under circumstances showing that he was unlawfully in pursuit of any animal shall be guilty of a breach of this Ordinance.

There shall be an annual close time for game in the Protectorate from the 15th March to the 15th June, both days inclusive, during which, notwithstanding any authorization conferred on licence-holders under this Ordinance no game animals mentioned in the First and Second Schedules to this Ordinance shall be hunted, killed, or captured.

The Governor shall have the power to alter by Proclamation the annual close season fixed in the preceding section and may extend or reduce the same.

The following licences may be granted by the Commissioner in charge of Berbera District, or such official or officials as may be authorized by the Governor, that is to say:—

- (1) A sportsman's licence.
- (2) A resident's licence.

In special cases and with the previous approval of the Governor, licences may be issued to non-Europeans.

The following fees shall be payable for licences, that is to say, for a sportsman's licence, 300 rupees, and for a resident's licence, 50 rupees.

Every licence shall be in force for one year only from the date of issue, provided that a resident's licence may be granted for a single period of 14 consecutive days in any one year on payment of a fee of 20 rupees. This fortnightly licence may be converted into an annual licence on payment of a further 30 rupees.

Officers of His Majesty's Ships visiting the Protectorate ports, and military officers of the Aden garrison may be granted the privilege of a resident's annual or fortnightly licence.

When it appears proper to the Governor for scientific or administrative reasons, he may grant a special licence to any person to kill or capture animals of any one or more species mentioned in the Schedules, or, in particular cases, to hunt, kill, or capture in a game reserve specified beasts or birds.

Every licence-holder shall keep a register of the animals killed or captured by him in the form specified in the Fourth Schedule to this Ordinance.

FIRST SCHEDULE

(SECTION 3)

Animals and birds not to be hunted, killed, or captured by any person except under special licence:—

1. Beira and Dik-dik (Erigavo District only).
2. Rhinoceros.
3. Wild Ass.
4. Female Ostrich.
5. Vultures.
6. Secretary Birds.

SECOND SCHEDULE

(SECTIONS 4 AND 12)

Animals and birds not to be hunted, killed, or captured by any person except under a sportsman's (Rs. 300) or a resident's (Rs. 50) licence:—

1. Antelopes and Gazelles:—

<i>Animal.</i>	<i>Number Allowed.</i>
i. Oryx	2
ii. Greater Kudu (<i>Strepsiceros</i>)	1
iii. Lesser Kudu (<i>Imberbis</i>)	2
iv. Swayne's Hartbeest	2
v. Clarke's Gazelle ("Dibtag")	2
vi. Klipspringer	2
vii. Beira (Not to be shot in Erigavo District)	2
viii. Pelzeln's Gazelle	3
ix. Waller's Gazelle ("Gerenuk")	3
x. Speke's Gazelle	3
xi. Soemmering's Gazelle	3
xii. Dik-dik (Not to be shot in Erigavo District)	20*
2. Lion	3
3. Cheetah	2
4. Aard Wolf	2
5. Black-eared Fox	2
6. Ostrich, Male	1
7. Egrets	2
8. Marabou Stork	2
9. Elephant	1
10. Leopard	2

Additional animals which licensee may be authorized to hunt, kill, or capture, on payment of additional fees.

1. Antelopes and Gazelles:—

<i>Animal.</i>	<i>Additional number Allowed.</i>	<i>Fee payable Rs.</i>
i. Oryx	1	30
ii. Greater Kudu (<i>Strepsiceros</i>)	1	50
iii. Klipspringer	1	15
iv. Pelzeln's Gazelle	1	15
v. Speke's Gazelle	3	15 each
vi. Soemmering's Gazelle	3	15 each

AMENDMENTS TO THE ABOVE

It is hereby enacted as follows:—

1. This Ordinance may be cited as "The Game Preservation (Amendment) Ordinance, 1932," and shall be read as one with the Game Preservation Ordinance (Chapter 64 of the Revised Edition of the Laws), hereinafter called the Principal Ordinance.

2. No person shall approach, in a motor vehicle or aeroplane, to within five hundred yards of any game animal for the purpose of hunting, killing, capturing or unduly disturbing such animal.

No person shall use a motor vehicle or aeroplane in such manner as to drive or stampede game for any purpose whatsoever.

No person shall shoot at any game animal from a motor vehicle or aeroplane or from within two hundred yards of a motor vehicle or aeroplane.

3. Nothing in this Ordinance shall be deemed to prohibit the use of a motor vehicle or aeroplane for the purpose of approaching game areas and for locating game.

The following portions of the Protectorate to be Game Reserves:—

All that land within a radius of 2 miles from the District Office at Buramo.

All that land within a radius of 2 miles from the District Office at Burao.

All that land within a radius of 2 miles from the District Office at Erigavo.

All that land within a radius of 2 miles from the District Office at Hargeisa.

All that land within a radius of 2 miles from the Fort at Sheikh.

Within the now declared Game Reserves all birds (other than sand-grouse) and animals shall be regarded as being included in Schedule I of the Ordinance.

NYASALAND

Game Licences

Visitor's Full Licence	£ 50
Protectorate Full Licence	5
Visitor's Temporary 14 days' Licence	5
Protectorate Temporary 14 days' Licence	2
Private Land Licence	2

Special Licences

Elephant Licence.—Issued only to the holder of a Visitor's or Protectorate Full Licence.

For the first Elephant	£ 10
For the second Elephant	15
For the third Elephant	15

Nyala or Rhinoceros Licence.—Issued only to the holder of a Protectorate Full Licence.

For one male Nyala or one Rhinoceros	£ 10
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Note.—No Protectorate Licence shall be issued to any person who does not satisfy the District Resident of the district in which he claims to reside that he is a *bonâ fide* resident in the Protectorate or a European Government official serving in Northern Rhodesia or Tanganyika Territory, or a member of His Majesty's Forces on the Active List.

SCHEDULES

Animal.	Maximum Number Allowed.		
	Visitor's Full.	Protectorate Full.	Temporary.
Hippopotamus	4	4	2
Buffalo	4	2	0
Eland	4	2	1
Roan	4	2	1
Sable	4	2	1
Hartebeest	4	4	2
Kudu	4	4	2
Waterbuck	4	4	2
Bushbuck	4	4	2
Impalla	4	4	2
Reedbuck	4	4	2
Puku	4	4	2
Oribi	Not more than 30 head in the whole and not more than 8 head of any one species irrespective of sex in either case.	Not more than 14 head in the whole, and not more than 4 head of any one species irrespective of sex in either case.	
Klipspringer			
Common Duiker			
Red Duiker			
Blue Duiker			
Sharp's Steinbuck			
Livingstone's Suni			

Note.—In addition to the above, the holders of a Visitor's Full Licence shall be entitled to hunt, kill or capture one male Nyala and one Rhinoceros.

Puku may not be hunted within one mile of each bank of the Bua River.

Notes:

1. Any officer applying for a Game Licence may require the applicant of a visitor to the Protectorate to deposit with the issuing officer a sum not exceeding one hundred pounds or to enter into a bond for a like amount as security for the due observance and performance of the provisions of the Game Ordinance and Regulations thereunder.

2. Every holder of a Game Licence is required to keep an accurate register of all game animals killed or captured by him in the form prescribed, and, before leaving the Protectorate or within fifteen days from the expiry of his Licence, whichever first occurs, shall deliver his licence and the register signed by himself to the Administrative Officer of the district in which he is at the time.

3. Certain areas in Nyasaland are proscribed as Game Reserves. These areas are subject to amendment from time to time. In addition restrictions operate from time to time in certain districts outside Game Reserves both in regard to the particular district and the species and number of animals permitted to be hunted. Information in this respect should be obtained from the Game Department when application is made for a Licence.

N O R T H E R N R H O D E S I A

Game Licences

Resident's Ordinary Licence	£ 3
Visitor's Ordinary Licence	15
Resident's Special Licence	20
(With an additional fee of £10 for each Elephant shot after the first.)	
Visitor's Special Licence	30
(With an additional fee of £10 for each Elephant shot after the first.)	
Governor's Licence	50
Traveller's Licence	1

Notes:

1. The holder of a Governor's Licence shall be deemed to be also the holder of a Bird Licence, an Ordinary and a Special Licence, and the holder of a Special Licence shall be deemed to be also the holder of a Bird Licence and an Ordinary Licence, and the holder of an Ordinary Licence shall be deemed to be also the holder of a Bird Licence.

2. A Traveller's Licence is valid for 30 days only and is issued only to a person who is *bond fide* travelling in or through the Territory. Not more than two Traveller's Licences may be issued to one person in the same calendar year, nor shall a second Traveller's Licence be issued to the same person until six months shall have elapsed since the expiration of the previous Traveller's Licence.

3. Licences expire on the 31st December of each year.

F I R S T S C H E D U L E

<i>Animal.</i>	<i>Ordinary Licence</i>	<i>Number which may be Hunted.</i>
Buffalo		Unlimited.
Bushbuck		"
Hartebeest		"
Mpala		"
Lechwe		"
Puku		"

<i>Animal.</i>	<i>Number which may be Hunted.</i>
Reedbuck	Unlimited.
Roan	"
Sable	"
Situtunga	"
Sassaby	"
Waterbuck	"
Zebra (except Mountain Zebra)	"
Wildebeest (except white-tailed variety) and two only in North-eastern Rhodesia	"
Eland	4 only
Kudu	2 "
Hippopotamus	2 "
(And any Antelopes or Birds not mentioned in the Second or Third schedules.)	

SECOND SCHEDULE

Special Licence

<i>Animal.</i>	<i>Number which may be Hunted.</i>
Elephant	3 only
Rhinoceros	3 "
Hippopotamus	4 "
Eland	4 "
Kudu	4 "
(And the other game as mentioned in the First Schedule above.)	

THIRD SCHEDULE

Governor's Licence

Giraffe	Unlimited
White-tailed Wildebeest	"
Gemsbuck	"
Mountain Zebra	"
West African Duiker	"
Ostrich	"
Vulture	"
Owl	"
Secretary Bird	"
Rhinoceros Bird	"
Nyala	"
White-backed Duiker	"
(And the other game as mentioned in the First and Second Schedules.)	

FOURTH SCHEDULE

Traveller's Licence

Bushbuck	Up to a maximum of 10 heads of game.
Hartebeest	"
Mpala	"
Puku	"
Duiker	"
Lechwe	"
Oribi	"
Reedbuck	"
Wildebeest (except in North-eastern Rhodesia)	"
(And other small buck or birds not mentioned in the other Schedules.)	

Notes:

1. It is forbidden to shoot Elephant whose tusks weigh less than 11 lbs. or the female of any animal accompanied by its young.

2. The following are classed as vermin and can be shot without a Licence:—

Leopard	Lion
Hyena	Pythons
Baboon	Poisonous Snakes
Cheetah	Hunting Dog
Jackal	Crocodiles
Destructive Monkey	Large birds of prey except Vultures and Owls.

3. Certain areas in Northern Rhodesia are proscribed as Game Reserves. These areas are subject to amendment from time to time. In addition, restrictions operate from time to time in certain districts outside Game Reserves both in regard to the particular district and the species and numbers of animals permitted to be hunted. Information in this respect should be obtained when application is made for a Licence.

A few remarks seem necessary on the Governor's Licence, costing £50. First of all, Giraffe should not be unlimited as there is only a herd of thirty animals or thereabouts in Northern Rhodesia. Then the mention of White-tailed Wildebeest, Gemsbok, Mountain Zebra, Ostrich and Nyala are absurd, for none of these species, so far as I have heard, exist in this territory. White-backed Duiker should, of course, be Yellow-backed Duiker, which is scarce in Northern Rhodesia, though more plentiful in the adjacent Congo Free State.

DENIS D. LYELL.

LAWS APPLYING TO THE IMPORT OF ARMS AND AMMUNITION INTO NORTHERN RHODESIA

The visitor to Northern Rhodesia who wishes to bring arms and ammunition with him would be well advised to send them "in bond" from the port he lands at to Livingstone.

On arrival at Livingstone the following is the procedure:—

(1) The arms, etc., are put in the Customs warehouse, which is near the station.

Rent: each case of ammunition, 6d. per week; each fire-arm, 1s. per week.

(2) Permits are obtained at the Customs Office near the station to import arms (2s. 6d.) and ammunition (6d.).

(3) Having obtained these permits the visitor must go to the District Officer, whose office is in the town, and—

(a) Register his fire-arms. For this purpose he must give full details of identifying numbers, marks, etc.

(b) Obtain a permit to carry fire-arms (10s.).

(c) Obtain a permit to possess ammunition (no charge).

(d) Obtain a certificate of competency to use a fire-arm. (No charge and only demanded at the discretion of the magistrate.)

(e) Obtain a permit to withdraw his arms and ammunition from the warehouse (6d.).

(4) When he has obtained these permits he may return to the Customs Office and obtain his fire-arms and ammunition.

The same procedure holds good at Ndola and Fort Jameson. Visitors entering the territory at any other place should go to the nearest District Officer, who will issue all the necessary permits.

No. .303 rifle may be imported into Northern Rhodesia without the express sanction of the Governor.

It is forbidden to export fire-arms or ammunition from Northern Rhodesia to other parts of Africa without a permit from a District Officer. Shotguns and shot cartridges can be exported to the Union of South Africa and South-west Africa without a permit, but rifles and rifle ammunition cannot be so taken without a permit from a District Officer, the Commissioner of Police, or any Customs collector.

EXTRACT FROM SIERRA LEONE GAME ORDINANCE

THE SCHEDULES

I

(SERIES A.)

1. The vulture.
2. The secretary-bird.
3. The owl.
4. The rhinoceros-bird or beef-eater (*buphaga*).

(SERIES B)

1. The giraffe.
2. The gorilla.
3. The chimpanzee.
4. The mountain zebra.
5. The wild ass.
6. The white-tailed gnu (*connochoetes gnu*).
7. The eland (*taurotragus*).
8. The little Liberian hippopotamus.

II

1. The elephant.
2. The rhinoceros.
3. The hippopotamus.
4. The zebra of the species not referred to in schedule I.
5. The buffalo.
6. The antelope and gazelle, especially species of the genera *bubalis*, *damaliscus*, *connochoetes*, *cephalophus*, *oreotragus*, *oribia*, *rhaphiceros*, *nesotragus*, *madoqua*, *cobus*, *cervicapra*, *pelea*, *aepyceros*, *antidorcas*, *gazella*, *ammodorcas*, *lithocranius*, *dorcotragus*, *oryx*, *addax*, *hippotragus*, *taurotragus*, *strepsiceros*, *tragelaphus*.
7. The ibex.
8. The chevrotain (*tragulus*).

III

1. The elephant.
2. The rhinoceros.
3. The hippopotamus.
4. The zebra of the species not referred to in schedule I.
5. The buffalo.
6. The antelope and gazelle, especially species of the genera *bubalis*, *damaliscus*, *connochoetes*, *cephalophus*, *oreotragus*, *oribia*, *rhaphiceros*, *nesotragus*, *madoqua*, *cobus*, *cervicapra*, *pelea*, *aepyceros*, *antidorcas*, *gazella*, *ammodorcas*, *lithocranius*, *dorcotragus*, *oryx*, *addax*, *hippotragus*, *taurotragus*, *strepsiceros*, *tragelaphus*.
7. The ibex.
8. The chevrotain (*tragulus*).

IV

1. The elephant.
2. The rhinoceros.
3. The hippopotamus.
4. The zebra of the species not referred to in schedule I.
5. The buffalo.
6. The antelope and gazelle, especially species of the genera *bubalis*, *damaliscus*, *connochoetes*, *cephalophus*, *oreotragus*, *oribia*, *rhaphiceros*, *nesotragus*, *madoqua*, *cobus*, *cervicapra*, *pelea*, *aepyceros*, *antidorcas*, *gazella*, *ammodorcas*, *lithocranius*, *dorcotragus*, *oryx*, *addax*, *hippotragus*, *taurotragus*, *strepsiceros*, *tragelaphus*.

7. The ibex.
8. The chevrotain (*tragulus*).
9. The various pigs.
10. The colobi and all fur-monkeys.
11. The aard-vark (*genus orycteropus*).
12. The dugong (*genus halicore*).
13. The manatee (*genus manatus*).
14. The small cat.
15. The serval.
16. The cheetah (*cynoclorus*)
17. The jackal.
18. The ard-wolf (*proteles*).
19. The small monkey.
20. The ostrich.
21. The marabou.
22. The egret.
23. The bustard.
24. The francolin, guinea-fowl, and other "game birds.
25. The large tortoise.

V

1. The lion.
2. The leopard.
3. The hyena.
4. The hunting dog (*lycaon pictus*).
5. The otter (*lutra*).
6. The baboon (*cynocephalus*) and other harmful monkeys.
7. Large birds of prey, except the vulture, the secretary-bird, and the owl.
8. Poisonous snakes.
9. The python.

VI

1. The great bustard.
2. The little bustard.
3. The guinea-fowl.
4. The francolin (bush fowl).
5. The pigeon, of various kinds.
6. The dove, of various kinds.
7. The quail.
8. The wild duck.
9. The teal.
10. The plover.
11. The curlew.
12. The snipe.
13. The spur-wing goose.

*EXTRACT FROM NIGERIA GAME
ORDINANCE*

Licences

(1) The following licences may be granted by the Governor or by such person as may be authorized by the Governor:—

- (a) A resident non-native's licence.
- (b) A visitor's licence.
- (c) A fortnightly licence.
- (d) A bird licence.

(2) The following fees shall be payable for licences, that is to say, for a resident non-native's licence, two pounds; for a visitor's licence, ten pounds; for a fortnightly licence, ten shillings; for a bird licence, five shillings.

(3) A resident non-native's licence and a visitor's licence shall be in force for one year from the date of issue, but, subject to the regulations may be renewed from month to month on payment of the prescribed fee.

(4) A fortnightly licence shall be in force for fourteen days from the date of issue of such licence but not more than one such licence shall be issued to the same person within a period of twelve months.

(5) A bird licence shall be in force for one year from the date of issue.

Where it appears proper to the Governor for scientific or other reasons, he may grant a special licence to any person to hunt, kill or capture any species of animal or bird in a game reserve, or any protected animal or bird. Such licence shall be subject to such conditions as to fees and security (if any), number, sex and age of specimen, district and season for hunting, as the Governor may determine.

The Governor in Council may by regulations provide for the granting of special licences authorizing the holders thereof to hunt, kill or capture the protected animals (other than elephant) mentioned in the First Schedule, subject to such conditions and on payment of such fees as may be prescribed.

Any person authorized to grant licences under section 17 may, on application of the holder of a resident non-native's licence or a visitor's licence, grant a special licence authorizing such person to hunt, kill or capture either one or two elephants as the applicant shall require and as shall be specified therein. Such special licence shall not authorize the holder to hunt, kill or capture any elephant having tusks weighing less than 20 lb. each. (*As amended by 26 of 1918, s. 2.*)

There shall be paid for such special licence the fees following:—

For a licence to hunt, kill or capture one elephant, ten pounds.

For a licence to hunt, kill or capture two elephants, thirty pounds.

Every licence granted under this section shall expire on the same date as the resident non-native's or visitor's licence held at the time of the granting of such special licence by the person to whom the same shall be granted and only one such special licence shall be granted to such person during the period of any such resident non-native's or visitor's licence: Provided, however, if such person shall have taken out a special licence authorizing him to hunt, kill or capture one elephant only, he may, on payment of a further fee of twenty pounds, be granted a licence authorizing him to hunt, kill or capture a second elephant.

When the holder of a resident non-native's or visitor's licence or a special elephant licence has been prevented by circumstances beyond his own control from making any use of such licence, he shall be granted on application a similar licence free of charge at any time within five years from the date of his unused licence.

FIRST SCHEDULE

Animals which may not be hunted, killed or captured (except under a special licence):—

Elephant,
Giraffe,
Rhinoceros,
Hippopotamus—when found in or on the banks of—
 (a) the Niger between Badjibo and Boussa;
 (b) the Gongola between Shillem and Gwani, or
 (c) the Cross River between Obubra and Ikoni.
Ostrich,
Manatee,
Vulture,
Owl,
Rhinoceros Bird,
Chimpanzee,
Eland,
Egret,
Marabou Stork.

SECOND SCHEDULE

Animals which may be hunted, killed or captured under a visitor's or resident non-native's licence:—

<i>Species.</i>	<i>Number which may be Killed or Captured.</i>
Hippopotamus (except where included in the First Schedule)	2
Bongo	1
Buffalo	4
*Roan Antelope	4
*Water Buck	4
*Bush Buck or Harnessed Antelope	4
*Reed Buck	4
*Hartebeest	4
*Senegal Hartebeest	4
*Buffon's Kob (Cobus kob)	8
Senegal or Red-fronted Gazelle (Rufi frons)	4
Situtunga	4
Addra Gazelle (Rufi collis)	2
Dama Gazelle	2
Dorcas	2
Duiker (all species)	20
Oryx (white)	2
*Oribi	8
Wart Hog	4
Greater Bustard	2
Crowned Crane	2
Colobus Monkey	2

Note.—In the case of the animals marked with a * above the Governor may allow a larger number, not exceeding double that stated, to be killed in certain special districts where the particular species is abundant, and the licence will be endorsed accordingly.

THIRD SCHEDULE

GAME BIRDS

Guinea Fowl,
Sand Grouse,
Red-eyed and Green Pigeons,
Rock Fowl,
Francolins,
Floricans,
Partridges,
Quail,
Geese,
Duck, Widgeon, Mallard
Teal,
Snipe,
Lesser Bustards.

INDEX

A

Aard Wolf, 138-151
 Abai River, 221
 Aberdares, 252-253
 Abu Buzma, 192
 Abyssinia and Semien, 210-228
 articles for barter in, 210
 Customs posts, 210
 fitting out caravan for, 210
 theft of animals in, 222
 Addax, 123
 hunting of, 173-192, 398-401
 Addis Ababa, 195, 210, 222
 Adis Gey, 214
 Adua, 195, 210, 212
 Agordat, 209
 Agra, 207
 Aik, 230
 Aiming, 60
 Albasso, 223-225
 Albert, Lake, 279
 Algeria, 124
 expenses, 126
 licences, 126
 seasons, 126
 Angola, 371-387
 carriers, 381
 description of climate, 371
 of country, 371
 of seasons, 372
 equipment and stores, 381
 import of firearms, 382
 licences, 383
 list of game in, 379-380
 Ankole, 280
 Ant-eaters, 152
 Antelope, killing birds, 142
 harness, 281
 sable, 311
 Somali, 246-249
 Aperture sights, 61
 Arabs, Beni Amer, 131
 Hamran, 131
 Argeen, 219
 Arua, 268-282
 Arusha, fitting-out base, 284, 306
 Arusi, 222-226
 Ash-bag for testing wind, 285
 Asmara, 195-210

Ass, wild, 203-207
 Atbara, 131, 137, 145, 146, 149
 Axum, 212

B

Bahr el Ghazal, 162-169
 Zeraf, 162
 Baker, Sir Samuel, 145
 Ballistics, 47
 Bangui, 399
 Baraka Wadi, 199-203
 Barbary States, 122-124
 choice of hunting ground, 123
 geography of, 122
 shikaris and servants, 124
 transport and camp equipment, 125
 Baringo district, 115
 Bechuanaland, 345
 Bedding roll, 19
 Beden, 208
 Beira Antelope, 194
 habitat of, 231, 246
 Berbera, 229, 239
 Bir Natrun, 180
 Blaine, Capt. G., 210, 231, 273
 Blantyre, 319
 Blue Nile, 127-161
 best seasons for, 129
 birds, and some animals of, 150-161
 game birds of, 160-161
 hawks and vultures, 157
 non-game birds of, 153-156
 small mammals of, 150-161
 Bongo, 255
 and dogs, 264
 description of, 265
 hunting, 259-266
 on Mount Elgon, 279
 Bor, 162
 Borkoru, heart of Giant Eland country,
 398
 Brazzaville, 395
 Brocklehurst, Capt. H. C., 129, 140,
 143, 145
 Buffalo, 85
 best rifle for, 90
 big Buffalo heads, 87
 forest, 94, 139

Buffalo—continued

- habits of, 86
- hunting of, 87
- incident with, 140
- in Kenya, 252
- most deadly shot for, 90
- range of, 85
- record heads, Uganda, 280, 289, 294
- spooring, 89
- stalking, 141
- tick birds, 89
- two main races, 85
- wounded, 92
 - approaching, 93
 - circling on spoor, 91
 - herd instinct of, 93
- Buganda, principal shooting grounds, 278
 - good for big Elephant, 286
- Bukedi, district, 279
- Bulhar, 234
- Bullets, designs of, 49, 56
- Bunyoro, 277, 282, 283, 286
- Burao, 230, 331, 236
- Bushbuck, black and red, 194, 212, 223, 317
 - big, 110, 146, 147
- Bush Cows, 89
 - bad temper of, 95
 - comparison with a Buffalo, 96
 - in Cameroons, 89
 - type of country frequented by, 95
- Butiaba, 268, 279
- Bwahit, 215-219

C

- Camels, 133
 - riding, 135
 - saddling, 134
 - trekking, 181
- Cameroons, 389
 - alternative routes, 389-390
 - import of rifles into, 389-390
 - licences, 389-390
 - list of game in, 389-390
- Camp Bundobast, 17-24, 197
 - furniture, 18
- Cape Town, 366
- Carriers, failings of, 169
- Cartridges, 44
- Chad, Lake, 398
 - list of game in, 388
 - military territory, 388
 - quickest way to desert shoot, 388
- Chambezi River, 339
- Chania River, 261

- Chapman, Abel, 165
- Cheetah, 139, 312
 - Cooper's, 335-336
- Chelalo Mountain, 223, 227, 316
- Chiggers, 273
- Chilwa, Lake, 316
- Chua district, 282
- Chungo, 337
- Collecting for Nat. Hist. Museum, 40
- Coloration protection, 321
- Constipation and malaria, 66
- Cooks, Sudanese, 175
- Cotton, Major Powell, 287
- Crocodile, 136, 162
- Cumming, R. Gordon, 358-365
 - battery used by, 358
 - hunting episode of, 361-365
 - quantities of game seen by, 363
- Cunene River, 371
- Cuts and abrasions, 66

D

- Dangerous game, 29
 - differences in hunting, 30
 - thick-skinned, 30
 - thin-skinned, 29
- Dankalis, 227
- Darfur, 173
- Davarik, 213
- Dedjak Ayale, 213
- Desert, the, shooting in, 28
- Diarrhoea, 67
- Dibatag, 231, 246
 - hunting of, 232
- Dibrovar, 213
- Dik Dik, 141, 193, 232
- Dinder River, 129, 130, 132, 141, 143, 146
- Djibouti, 193, 195
- Dogs, wild, 151
 - hunting, 322
- Dongola, 173
 - desert, climate of, 178
- Donkeys, 133
- Duiker, Abyssinian, 141, 194, 221, 223, 256
 - yellow-backed, 281
- Dul Bahanta, 247
- Durban, 135

E

- Egrets, white, 89
- El Ain well, 179
- Eland, 254
 - hunting of, 310

Eland, Giant, 168-172, 399
 hunting of, 170-171, 401
 range of, 398-401
 Electric torch, for night shooting, 61
 Elephant, 97, 277, 369
 asleep, 99, 163,
 big tuskers, 284
 rare in Nyasa and N. Rhodesia,
 102
 brain and heart shot, 99, 163, 288,
 289
 cemeteries, 102, 164
 clothes for, 97
 danger of long shots, 101
 heavy ivory, 163
 hunting in Uganda, 283-289
 in Tanganyika, 312-313
 luck in Elephant shooting, 300-303
 lungs, 100
 main points in Elephant hunting,
 97
 on Blue Nile, 139
 on White Nile, 162
 power of scent, 101, 285
 record in East Congo, 108
 rifles for, 97, 287
 rumbling noises from, 102, 286, 301
 shooting a record, 111
 to distinguish male and female, 287
 travelling long distances, 101
 trip after in N. Rhodesia, 103
 unlucky day after, 107
 usual procedure of hunter, 102-103
 El Obeid, 173
 Embarrass, 214
 Entebbe, 279
 Equimina, 376
 Eritrea, 193, 194, 195, 197-209

F

Falcons, 157
 Fever, spirillum, 67, 273
 malaria, 66, 273
 Fishing, 132, 135
 Fort Lamy, 389
 Archambault, 389
 French Equatorial Africa, 388-401
 Giant Eland, 398-401

G

Gallabat, 133
 Game birds of Blue Nile, 160-161
 Game, dangerous, 69-121
 thick-skinned, 85-121
 thin-skinned, 71-84

Game distribution in Africa, 403-405
 ordinances, 406-438
 Gan Liba, 232
 Gash River, 209
 Gazelle, Addra, 183
 Ariel (or Soemmering's), 132, 144,
 203, 208, 227, 233
 Cuvier's, 123
 Dorcas, 177, 181, 183, 187
 Grant's, 279
 Heuglin's, 132, 144, 194, 209
 Isabella, 201, 203, 208
 Loder's, 123
 Red-fronted, 144, 177, 181
 Gedaref, 131, 133
 Geech, 214, 219
 Gemsbuck, 368, 378
 hunting of, 344-350
 Geraan, 174, 184
 Gerenuk, 194, 227, 232
 Giraffe, 236, 253, 279
 Gojam, 221
 Golis range, 234
 Gondar, 220
 Portuguese castles at, 221
 Guban, 230, 234
 Gulu district, 282
 good for big Elephant, 282
 Guns, 20

H

Hagar Nush, 205
 Hallaling, 39
 Hamra Kola, 183-185
 Hargeisa, 230, 233
 Hartebeest (*bubalis*), 123
 Hunter's, 256
 Swayne's, 194, 227, 232
 Tora, 132, 141, 194
 Haud, 234
 Hawash, 227
 Hawks, 157
 Hippopotamus, 120-121, 149, 253, 314
 attacks on boat by, 149
 Hog, Giant Forest, 392-394
 Hunting and stalking, 25
 types of ground, 25
 Hyenas, spotted and striped, 151

I

Ibex, Nubian, 193-228, 194, 197, 199,
 205
 habits of, 201
 Walia, 210-228
 Impala, 256

K

- Kafu River, 278
- Kafue River, 337
- Kagera River, 280
- Kajabe, 260
- Kalahari Desert, 342-365
- Kampala, 268-278
- Kampanda, 340
- Kano, 389
- Kaoko veldt, 369
- Karora, 202, 206, 207
- Kasigan, 254
- Kenya, 250-266
 - Bongo hunting in, 259-266
 - Elephants in, 251
 - expenses of shoot in, 258
 - game laws, 410-415
 - game reserves, 414-415
 - important game of, 251
 - Mountain, 252
 - seasons of year, 257
 - transport of, 257
- Khartoum, 128, 129, 131, 162, 168
- Khor Royan, 132
 - Hafta, 204
- Kiambu, 260
- Kigezi district, 280-281
- Kilimanjaro, 304
- Kinangop, 255, 261
- Kitchen outfit, 22
- Klipspringer, 193, 220, 233
- Kob, white-eared, 167
 - Uganda, 282
- Kodok, 162
- Kouyou River, 395
- Kudu, Greater, 147, 193, 194, 207, 232, 254, 279, 309, 317
 - good, 132, 186
 - methods of hunting, 148
 - size of heads, 148
- Lesser, 194, 227, 232, 254, 279, 310

L

- Lafarug, 231
- Lajo, 224
- Lake No, 162
- Lammergeyer Eagles, 220
- Lango district, 279
- Lanterns, candle, 18
- Lechwe, red and black, 205, 324
 - hunting of, 337-339
- Leopards, 71, 73-74, 75, 82, 133, 138, 165, 166-167, 194
 - Black, 194

- Leopards—*continued*
 - elusiveness of, 138
 - episodes, 82-84
 - sitting up for, 138
- Libyan Desert, game of, 127
- Lions, 71, 75, 133, 137, 194, 232, 298-299
 - aggressiveness of, 75
 - best position for vital shot, 72
 - best rifle for, 77
 - driving, 81
 - episodes, 78-81
 - eyesight of, 82
 - good places for, 239, 253
 - hunting with dogs, 76
 - in Somaliland, 239
 - lucky episode, 165
 - on Bahr el Zeraf, 165
 - putting out kills for, 76
 - reasons for considering most dangerous animal, 71
 - riding down on horseback, 75
 - small bore rifle for, 72
 - spooring in Somaliland, 240-245
 - various ways of hunting, 71, 294-299
- Livingstone's Suni, 325
- Loanda, 371
- Loangwa River, 104
- Lobelias, Giant, 214-216
- Lobito, 371
- Lorian Swamp, 251
- Luapula River, 338

M

- Machans, 137
- Magrur Wadi, 180
- Mandere, 232
- Mareb River, 210
- Marsabit, 253
- Masaka district, 278
- Mashiel Wadi, 201, 205
- Masindi, 279-282
- Massawa, 193-195
- Maunga, 254
- Measurement of specimens, 32
- Medicines, 23, 65
 - list of equipment, 65, 273-275
- Meidob, 173, 178-180, 192
- Meru Mountain, 304
- Millais, J. G., 384
- Mirages, 183
- Modjo, 222
- Molopo River, 344
- Monkeys, 150
 - Gelada, 194, 220

Moshi, 304, 306
 Mossamedes, 371
 Mountain shooting, 25
 Mubendi, 279
 Muchinga Range, 105
 Mugatta, 132, 137
 Muger River, 221
 Mules, 133

N

Nairobi, 260
 Naivasha, 180
 Nakfa, 195, 206
 Namasigali, 279
 N'Dola, 337
 Newbold, 177
 N'Gezi for Situtunga, 281
 Nigeria, game laws, 435-438
 list of game, 437
 Night lights, 137
 Nile, Blue, 129
 Nimr Hassan, 178
 Nimule, 207
 N'Kolo Hills, 224
 North Africa, 122
 Red Deer, 123
 Nubas, 179
 Nubian Ibex, 194, 201
 Nyala, Mountain, 194, 210-222, 225,
 226
 Nyala, haunts of, 317
 hunting in Nyasaland, 321-327
 Zulu, 351, 355
 Nyasaland, game laws, 430
 Gnu, 316
 list of game of, 430

O

Ogaden, 235, 241, 247
 Oribi, 142
 Abyssinian, 194, 221, 223
 Oryx Beisa, 193, 194, 199, 202
 in Sudan, 204, 233, 279
 Callotis, 255
 White, 184-191, 398-401
 Ostrich, 179, 184, 237

P

Packing trophies, 38
 Photography, 131
 Pig, Giant, 282
 Pitsani, 345

Plains, the shooting in, 27
 Poachers, Abyssinian, 131
 Port Sudan, 131-193
 Preserving skins, 32
 Pressure, 47
 Puku, 105

R

Rahad River, 129-130, 133, 137, 143
 Ranges to shoot at, 130
 Red Sea Hills, game of, 128
 Red Sea, Western Littoral of, 193-228
 expenses shooting in, 195
 hills, 197-209
 Reedbuck (*bohor*), 143, 194, 221-223,
 356
 Rhino, 113, 252, 279
 anecdote, 118-119
 Black, danger from, 113
 distribution of, 113
 habits of, 113
 hunting, 115
 keen scent of, 114
 Blue Nile, 139
 difference between White and Black,
 113
 Northern, 117
 White, 108, 116, 118
 Rhodesia, Northern, 328-341
 fitting-out places, 328
 game laws, 431
 game of, 330-334
 game reserves, 433
 import of arms, 433
 list of game, 431-432
 native names of game, 333
 Rifles for big game, 41
 actions of, 44
 ball and shot, 64
 buying a, 61
 choice of, 52
 cleaning and care of, 62
 double-barrelled, 42
 miniature, 64
 recoil, 47
 single-barrelled, 44
 single-barrelled magazine, 44
 swift loading, 44
 Rift Valley, 304
 Roan Antelopes, 145, 146, 255, 279,
 375
 Roscires, 133
 Rowland Ward, 110
 Rudolf Province, 283
 Ruwenzori, 280

S

- Sable Antelope, 255
 - Giant, 373, 384
 - habitat of, 373
 - habits of, 375
 - hunting of, 385-387
- Saleh Plain, 208
- Sarsfield Hall, 173, 180
- Selous, F. C., 167, 171, 172, 384
- Semien Mountains, 195, 212
- Semiliki River, 280
- Senussi, 180
- Servants, 22
- Sessi Islands, 279
- Setit, 129, 145, 146, 149
- Sharag, 201
- Shari River, 388
- Shebat Wadi, 200
- Sheep, Barbary, 177, 192
- Sheik, 230, 231, 236
- Shikaris, 167
- Sierra Leone, game laws, 434-435
 - list of game, 434-435
- Sighting of rifles, 51, 57
 - telescopic, 58, 59, 130
- Situtunga 162, 163, 279, 340, 395-397
- Skinning, 33-34
- Sleeping sickness, 281
- Sobat River, 162
- Soderi, 174, 176, 178
- Somaliland, British, 229-249
 - game of, 229-249
 - habitat of, 230-231
 - Northern, 234-239
 - specimens of game in, 235-237
- Somaliland, game distribution in, 235-237
 - game laws, 427
 - game reserves, 430
 - Lion hunting in, 239
 - list of game, 428-429
- Somkele, 351
- South Africa, 342-365
 - big game in early days, 358-365
 - distribution of game in, 342
- South-west Africa, 366-370
 - best seasons for, 368
 - description of country, 366
 - game reserves in, 366
 - good shooting base, 367
 - licences, 369
 - list of game of, 368
- Springbuck, 372
- Stores, 20
 - list of, 21
- Suakin, 199

- Sudan, best shooting districts of, 127
 - Blue Nile, 150
 - equipment, 134
 - expenses, 128
 - fitting-out base, 128
 - game laws, 406
 - game list of, 407
 - transport, 128
- Sudd, 162, 165

T

- Takazze, 212
- Tana River, 251-253
- Tanga, 304, 306
- Tanganyika, climate and seasons, 305
 - game laws, 421-427
 - hunting in western territory of, 309-314
 - list of game of, 307, 421-422
 - northern area of, 304-308
 - reserves, 424-426
- Teiga, 173, 181, 191
- Hills, 180
- Tents, 18
- Thika River, 253
- Tiang, 141
- Ticks, 67
- Tokar, 199
- Toro, 277, 288
- Trophies, Labelling, 39
- Tsana Lake, 221
- Turkana, 254

U

- Uaso Nyiro, 252
- Uganda, 267-303
 - camp outfit, 270-271
 - climate, 267
 - country and its game, 276-299
 - Eastern Province, 279
 - game laws, 415-421
 - game, list of, 418
 - game reserves, 420
 - Northern Province, good shooting grounds, 281
 - seasons, 267
 - servants, 268
 - way to reach, 267
 - White Nile district for White Rhino and Giant Eland, 282
 - Province, 279
- Ugandai-chari, list of game in, 389
- Umlehei, 181

V

Vaalpens, 346
Velocity, 47
Victoria Lake, 253, 269, 279
Voi, 251

W

Wadi el Haraz, 181, 191
el Malik, 179
Hawa, 179, 184
Walia Ibex stalking, 217
Wanderobo nation, 260
Wart-hog, 149
Waterbuck (*defassa*), 142, 146
good, 281

Water, scarcity of, 177
Wau, 168
Webbi River, 224, 225, 234, 236
White Nile, game of, 127, 162,
168
Windhoek, 366
Wolf, Red, Abyssinia, 194, 220-221
Wounds, 68

Z

Zomba, 319
Zululand, 342, 351
best fitting-out bases, 342
Waterbuck, 356
Zwai, Lake, 223

